

Assessment on Unit 1

1



First: Choose the correct answer:

- a If $12 \times 34 = 408$, then $408 \div 12 = \dots\dots\dots$. (12 or 34 or 408 or 36)
- b If $574 = 41 \times 14$, then $580 \div 41 = 14$, and the remainder is $\dots\dots\dots$.
(14 or 41 or 6 or 16)
- c A number that, if divided by 8, the quotient will be 16, and the remainder is 3.
(131 or 128 or 19 or 24)
- d $\dots\dots\dots$ is a factor of all numbers. (0 or 1 or 2 or 3)
- e 7, 5, 3, and 2 are $\dots\dots\dots$ numbers. (even or odd or prime or otherwise)
- f The greatest common factor of any two prime numbers is $\dots\dots\dots$.
(0 or 1 or their sum or their product)
- g The least common multiple of two prime numbers is $\dots\dots\dots$.
(the greatest number or 1 or their sum or their product)
- h $6 \times (7 + 5) = \dots\dots\dots$
((6×7) + (6×5) or $6 \times 7 + 5$ or $6 \times 7 \times 5$ or ($6 + 7$) \times ($6 + 5$))
- i $(2 \times 8) + (2 \times 3) = \dots\dots\dots$
($2 \times 8 \times 3$ or $2 + (8 \times 3)$ or $2 \times (8 + 3)$ or $2 \times 8 \times 2 \times 3$)
- j $1\frac{3}{4} + 2\frac{1}{2} = \dots\dots\dots$ ($4\frac{1}{4}$ or $3\frac{1}{4}$ or $3\frac{4}{6}$ or 4)

Second: Complete the following:

- a If $1,050 \div 12 = 87$, and the remainder is 6, then $12 \times 87 = \dots\dots\dots$.
- b If $351 \div 27 = 13$, then $13 \times 27 = \dots\dots\dots$.
- c The prime number has $\dots\dots\dots$ factor(s).

- g The least common multiple of any two prime numbers is
- h $8 \times (2 + 7) = (\dots \times \dots) + (\dots \times \dots)$
- i $3\frac{1}{5} + \dots = 5\frac{1}{2}$
- Third: Answer the following:**
- 1 Find the result:
- a $6,527 \div 9 = \dots$
- b $2,592 \div 24 = \dots$
- c $5\frac{3}{8} + 2\frac{5}{6} = \dots$
- d $7\frac{1}{4} - 3\frac{3}{5} = \dots$
- 2 A compound consists of 840 housing units. each

1 Find the result:

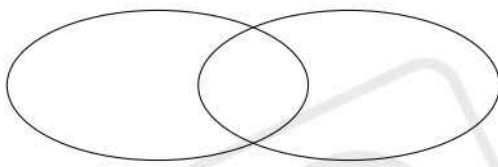
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d $7\frac{1}{4} - 3\frac{3}{5} = \dots\dots\dots$

- How many buildings in this compound?

Final Revision

3 Find the GCF and LCM using Venn diagram for numbers 24 and 16:



GCF =

LCM =

24 =

16 =

4 Complete the following using a Venn diagram:

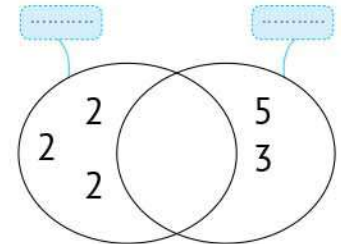
a The two numbers represented in the Venn diagram are and

b The common prime factors of the two numbers are

c The GCF for the two numbers is

d The LCM for the two numbers is

e Are the two numbers relatively prime numbers? (Yes or No)



5 Adel has 18 red roses and 12 white roses. He wants to distribute them in equal bouquets, so that each bouquet contains the same number of roses of each color. What is the largest number of bouquets Adel can make and how many red and white roses are in each bouquet?

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6 Hany has 25 pounds. He bought a piece of cake for $9\frac{1}{2}$ pounds and a chocolate drink for $5\frac{1}{4}$ pounds. How much money is left with Hany?

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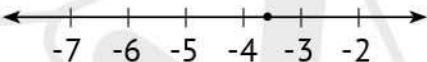
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Assessment on Unit 2



First: Choose the correct answer:

- a** -7 is to the right of on the number line.
(-8 or 8 or -6 or 6)
- b** is neither a positive number nor a negative number.
(0 or 1 or -1 or 10)
- c** The largest non-negative integer is (-1 or 1 or 100 or 0)
- d** (-5.7) is a/an
(natural number or integer or rational number or counting number)
- e** The absolute value of “0” is a/an
(counting number or natural number or negative integer or odd number)
- f** The additive inverse of $-\frac{2}{3}$ is ($1\frac{1}{2}$ or $-\frac{3}{1}$ or $\frac{3}{2}$ or $\frac{2}{3}$)
- g** -0.3 in the form $\frac{a}{b}$ is ($-\frac{3}{10}$ or $-\frac{1}{3}$ or $-\frac{3}{1}$ or $\frac{10}{3}$)
- h** The rational number represented on the corresponding number line is

 (-3.4 or -4.3 or 3.4 or 4.3)
- i** $|-3.7| =$ (3.7 or -3.7 or 37 or -73)
- j** The absolute value of “zero” is (10 or 0 or -1 or 1)

Second: Complete the following:

- a** The integer that expresses (The temperature is 7 below zero) is
- b** The next number to “ -1 ” is
- c** The additive inverse of 11.5 is

Final Revision

- d The smallest positive integer is
- e The number and its opposite have the distance from zero, but in two directions on a number line.
- f The rational number “-7.2” lies between the two integers and
- g All natural numbers are numbers and numbers.
- h The rational number $-\frac{3}{2}$ in the decimal form is
- i If $|a| = 8$, then $a =$ or
- j If $|5.6| = n$, then $n =$

Third:

1 Complete using ($<$, $=$, or $>$):

a -3.8 -1.8

b $|-2.5|$ $|-3.6|$

c $|\frac{2}{5}|$ $|-0.4|$

d $-3\frac{7}{8}$ $|-3\frac{5}{8}|$

2 Arrange the following numbers in a **descending** order:

0.55 , $-\frac{3}{5}$, $|\frac{1}{2}|$, $-\frac{1}{4}$, $|0.8|$

Assessment 1

First: Choose the correct answer:

- a If $6,688 = 19 \times 352$, then $6,694 \div 19 = 352$, and the remainder is
(14 or 41 or 6 or 16)
- b The greatest common multiple of 9 and 8 is (9 or 8 or 1 or 72)
- c The prime factors of 20 are
(2×10 or 5×4 or $2 \times 2 \times 5$ or 1×20)
- d All negative numbers are zero. (< or = or > or \geq)
- e -25 -12 (< or = or > or \geq)

Second: Complete the following:

- a $6 \times (7 + 5) = (\dots \times \dots) + (\dots \times \dots)$
- b comes just before -1 .
- c is the opposite number of “10”.
- d The integer that expresses (The value of the loss is 20 LE) is
- e If $7 = |a|$, then $a =$ or

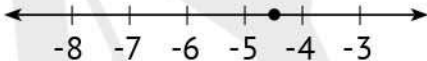

Third: Answer the following:

- a If the total price of 25 books is 2,825 pounds, then what is the price of one book?
.....
- b Ahmed wants to plant 45 sunflower plants and 81 corn plants in his garden. If he put the same number of plants in each row, what is the greatest number of rows can he make?
.....
.....
.....

=
=
GCF =

Assessment 2

First: Choose the correct answer:

- a The rational number represented on the corresponding number line is

 ($4\frac{2}{2}$ or $5\frac{2}{3}$ or $-4\frac{2}{3}$ or $-5\frac{2}{3}$)
- b 12 and are relatively prime numbers. (16 or 15 or 35 or 20)
- c The opposite of 6 > (-5 or 5 or -7 or 7)
- d $\frac{3}{5}$  $-\frac{5}{3}$ (> or = or < or \geq)
- e - 4 is to the right of on the number line. (-5 or 5 or -3 or 3)

Second: Complete the following:

- a The additive inverse of is itself.
- b $-\frac{5}{4} =$ (In the decimal form)
- c \times (..... +) = (2×8) + (2×6)
- d is a number whose prime factors are 3, 2, 7.
- e $3\frac{1}{5} +$ = $8\frac{1}{2}$

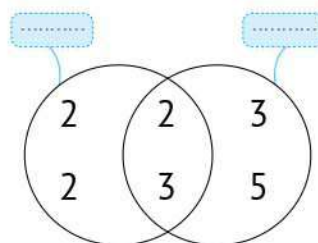
Third: Answer the following:

1 Find the results :

- a $3\frac{5}{8} + 4\frac{1}{6} =$
- b $4\frac{1}{2} - 1\frac{3}{4} =$

2 Complete the following using the opposite Venn diagram.

- a The two numbers are and
- b The GCF is c The LCM is



Assessment

on Unit

3



First: Choose the correct answer:

- a The algebraic term "5ab" is from factors. (1 or 2 or 3 or 4)
- b The number of terms that makes up the algebraic expression " $3xy + 2x - 5$ " is term. (2 or 3 or 4 or 5)
- c The absolute term in " $3m + 2$ " is (2 or 3 or m or 3m)
- d Subtracting the number 3 from twice the number $y =$
($3 - 2y$ or $2(y - 3)$ or $3y - 2$ or $2y - 3$)
- e Samah is now 25 years old. How old was she h years ago?
($25 - h$ or $h - 25$ or $25 - h$ or $25h$)
- f $5 \times 5 \times 5 =$
(5×3 or 5^3 or 3^5 or $5 + 3$)
- g $3^2 + 4$ $9 + 2^2$ ($>$ or $=$ or $<$ or \leq)
- h If the price of one book is 15 pounds, what is the price of b number of books?
($15b$ or $15 - b$ or $b - 15$ or $b + 15$)
- i The value of $(12 - x^3) \div 2$ if $x = 2$ is (8 or 10 or 2 or 6)
- j The order that is used to find the value of $2 + 3(m^2 - 5)$ if $m = 3$ is
(putting exponents in their simplest form, subtraction, multiplication, addition
or addition, exponents, subtraction, multiplication
or putting the exponents in the simplest form, addition, subtraction, multiplication
or multiplication, addition, exponents in simplest form, subtraction)

Second: Complete the following:

- a If the sum of two integers is S and one of them is 10, then the other number is
- b In $7xy$, the coefficient is
- c Like terms for " $3n + 3 + 2n$ " are
- d Twice of subtracting 5 from the number $w =$

Final Revision

- e The verbal form for " $3x - 5$ " is
- f Ahmed's car consumes " n " liters of fuel to travel a distance of 100 km. How many liters does the car need to travel a distance of 600 km?
- g The value of " $4 \times (y^3 - 7)$ " If $y = 3$ is
- h $3 \times 3 \times 3 \times 3 \times 3 \times 3 =$
- i $5 \dots = 1$ j $4 \dots = 4$

Third: Answer the following:

- 1 Moataz saved " n " pounds per day for 9 days, then he got 20 pounds from his father.
- a Write an algebraic expression that expresses the amount that Moataz has now:
- b Complete using the preceding algebraic expression:
- 1 The number of terms of an algebraic expression is
 - 2 The coefficients are
 - 3 The constants are
- 2 Find the value of each of the following two algebraic expressions using the numbers shown, then indicate if these expressions are equivalent or not :

	$2x + 1$	$5x - 4$	Equal or Not?
If $x = 5$			
If $x = 3$			

From the previous table, we find that the two algebraic expressions are (Equivalent or Not).

Assessment 1

First: Choose the correct answer:

- a A number that, if divided by 9, the quotient is 15, and the remainder is 3, is (135 or 128 or 138 or 27)
- b is the opposite of -12 (-12 or 12 or 1 or 2)
- c The algebraic term " $\frac{3}{4}x$ " has a factor. (1 or 2 or 3 or 4)
- d If we subtract 9 from the number x , the result is ($x + 9$ or $x - 9$ or $9 - x$ or $9x$)
- e $1^5 =$ (1×5 or $1 + 5$ or 1 or 0)

Second: Complete the following:

- a If $2,000 \div 51 = 39$ and the remainder is 11, then $51 \times 39 =$
- b The absolute term in the algebraic expression " $5b + 3.2$ " is
- c A number whose prime factors are 2, 3, 5 is
- d Salah saves Z pounds per day. How much does he save in a week?
- e In 4 is called the base and 2 is called the exponent.

Third: Answer the following:

- a Find the value of " $4a - 15 \div 3$ " [If $a \times 2.5$]

.....
.....

- b Arrange the following numbers in a **descending** order:

$$0.8, -\frac{1}{5}, \frac{1}{2}, -\frac{3}{4}, |-0.25|$$

The order:,,,,

- c Bassem runs one kilometer in 15 minutes.

Write a mathematical expression that expresses the number of kilometers that Bassem runs in " t " minutes.

Assessment 2

First: Choose the correct answer:

- a If $36 \times 28 = 1,008$, then $1,008 \div 28 = \dots\dots\dots$. (12 or 34 or 408 or 36)
- b In “ $-8a$ ” the algebraic factor is $\dots\dots\dots$. (a or 8 or $8a$ or -8)
- c $| -3.7 | = \dots\dots\dots$. (3.7 or -3.7 or 37 or -37)
- d $2 \times 2 \times 2 = \dots\dots\dots$. (2^3 or 3^2 or 2×3 or $2 + 3$)
- e $2^3 + 2^3 = \dots\dots\dots$. (2^6 or 4^3 or 2^4 or 4^6)

Second: Complete the following:

- a $\dots\dots\dots$ is the smallest prime number.
- b The smallest positive integer is $\dots\dots\dots$.
- c The number of terms in the algebraic expression $5y - 25z$ is $\dots\dots\dots$.
- d If the price of a pen is 8 LE then the price of x pens is $\dots\dots\dots$.
- e The verbal form for the algebraic expression $3b + 4$ is $\dots\dots\dots$.

Third: Answer the following:

1 Follow the order of performing operations to find:

a $4^2 + (2^4 - 7) \times 2$

= $\dots\dots\dots$
 = $\dots\dots\dots$
 = $\dots\dots\dots$

b $(2^3 + 6) \div (3^2 - 2)$

= $\dots\dots\dots$
 = $\dots\dots\dots$
 = $\dots\dots\dots$

2 Wael collected $3\frac{3}{4}$ kilograms of dates and gave $2\frac{1}{5}$ kilograms to his friend.

How many kilograms are left with Wael?

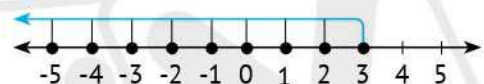
Assessment on Unit 4



First: Choose the correct answer:

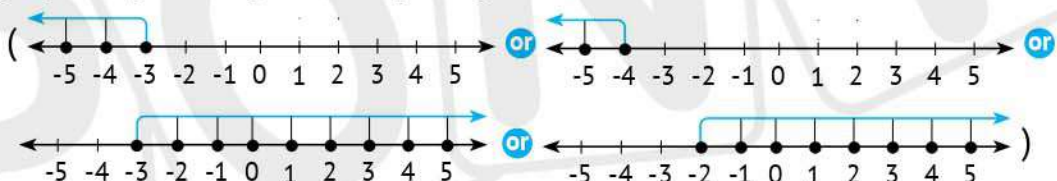
- a If $a + 3 = 7$, then $a =$ (7 or 3 or 10 or 4)
- b If $b = 6$, then $b -$ = 2. (4 or 8 or 2 or 3)
- c If $5x = 40$, then $x =$ (35 or 45 or 8 or 200)
- d If $y = 6$, then $\frac{y}{\text{.....}} = 2$. (3 or 8 or 12 or 4)
- e The inequality that represents all values "greater than 4" is
($x > 4$ or $x < 4$ or $x \leq 4$ or $x \geq 4$)
- f The inequality that represents all values
"less than or equal to -2 " is
($x > -2$ or $x < -2$ or $x \leq -2$ or $x \geq -2$)
- g The inequality that represents all negative numbers are
($x > 0$ or $x < 0$ or $x \leq 0$ or $x \geq 0$)
- h Which of the following is a solution to the inequality $x < -6$?
(5 or -5 or -7 or 7)

- i The inequality represented by
the corresponding graph is



($x > 4$ or $x < 4$ or $x \leq 4$ or $x \geq 4$)

- j The graph expressing the inequality " $x < -3$ " is



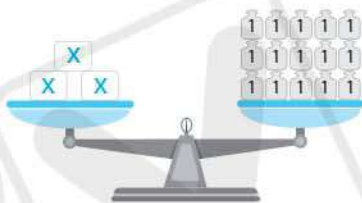
Second: Complete all of the following:

- a If $x + 7 = 9$, then $x =$ b If $4m = 20$, then $m =$
- c If $b = 12$, then $b -$ = 8. d If $d = 3$, then $\times d = 18$.

Final Revision

e If $k = 6$, then $2 = \dots \div k$.

f The equation that represents the corresponding model is \dots .



g The inequality that represents all values "less than -6 " is \dots .

h The inequality that represents all values "greater than or equal to 3 " is \dots .

i The inequality that represents all positive integers are \dots .

j The similarities between the graphs of the two algebraic expressions $x = 9$ and $x \geq 9$ are \dots .

Third: Answer the following:

1 Find the value of the variable in each of the following equations:

a $x - 5 = 4$

= \dots

= \dots

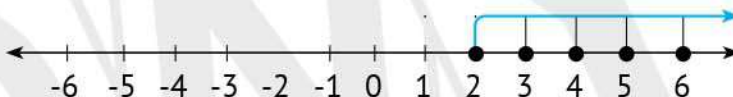
b $4x = 24$

= \dots

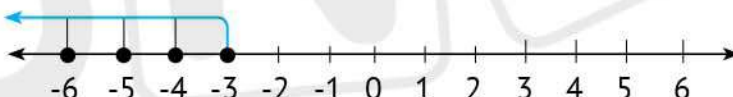
= \dots

2 Use the following number line to write inequalities:

a



b



Assessment 1

First: Choose the correct answer:

- a is a factor of all numbers. (0 or 1 or 2 or 3)
- b The number -3 is located to the right of the number on the number line. (-4 or 4 or -2 or 2)
- c In the algebraic term " $-5 a b$ " the coefficient is (a or b or 5 or -5)
- d If $5x = 15$, then $3x =$ (3 or 12 or 9 or 15)
- e Which of the following is a solution to the inequality " $x > -2$ " ? (-5 or -3 or -2 or 0)

Second: Complete the following:

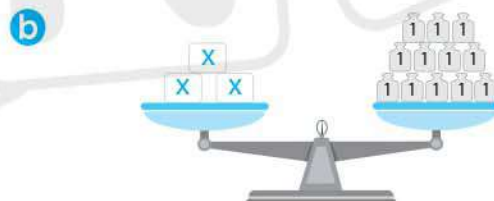
- a is the smallest prime number.
- b If $b = |-7|$, then $b =$
- c Ahmed is now " y " years old, how old was he 3 years ago?
- d If $b = 6$, then $b +$ = 8.
- e The inequality that represents all values greater than or equal to -8 is

Third: Answer the following:

Write the equation that represents each of the following models, then find the value of x :



Equation:
 $x =$



Equation:
 $x =$

Assessment 2

First: Choose the correct answer:

- a** The least common multiple of any two prime numbers is
(the greater number **or** 1 **or** their sum **or** their product)
- b** The integer that expresses (The depth of a well of 8 meters) is
(-8 **or** 8 **or** $\frac{1}{8}$ **or** $-\frac{1}{8}$)
- c** The number of terms that make up the algebraic expression “5 + 2 a b” is
(2 **or** 3 **or** 4 **or** 5)
- d** If Basim is “x” years old now, how old will he be after 5 years?
($x - 5$ **or** $x + 5$ **or** $5 \div x$ **or** $5x$)
- e** If “a + 3 = 7”, then 2 a =
(10 **or** 4 **or** 8 **or** 20)

Second: Complete the following:

- a** The LCM of the two relatively prime numbers is
- b** $8 \times (\dots + \dots) = (\dots \times 9) + (\dots \times 2)$
- c** The number “-3” is the opposite of the number
- d** The absolute term in the algebraic expression $7x + 1$ is
- e** The inequality that represents all values less than -6 is

Third: Answer the following:

- 1** A school has 604 boys and 521 girls, it is intended to divide the boys and girls equally into 25 classes in the school.
How many students will be in each class?
-
-

- 2** Solve each of the following equations:

a $x - 4 = 8$

=

=

b $3y = 24$

=

=

Assessment on Unit

5



First: Choose the correct answer:

- a** In the equation " $a = 3b$ ", the independent variable is
(a or b or 3 or $3b$)
- b** In the equation " $m + 5 = r$ ", the dependent variable is
(m or 5 or r or $5m$)
- c** If the independent variable is the number of studying hours, then the dependent variable is the (exam result or school uniform color or means of access to school or number of class students)
- d** If the dependent variable is the number of training hours, then the independent variable is (the number of days you go to the club or the distance between the club and the house or the color of your training clothes or the height of the house)
- e** The equation that expresses the relationship "subtract from 6" is
($y = x - 6$ or $y = 6 - x$ or $y - x = 6$ or $y = 6x$)
- f** The equation that expresses the relationship "add 5 then multiply by 2" is ($y = 2x + 5$ or $y = 2(x + 5)$ or $y = 5x + 2$ or $y = (x + 2) \times 5$)
- g** The relation that represents the equation " $y = (x - 8) \div 3$ " is
(divide by 8, then subtract 3 or subtract 8, then divide by 3 or divide by 3, then subtract 8 or subtract 3, then divide by 8)
- h** If $y = 2x + 3$, $x = 2.5$ then $y =$ (5 or 11 or 8 or 5.5)
- i** If $y = 2(x + 4)$, $x = 5$, then $y =$ (11 or 29 or 18 or 14)
- j** If $y = 5x - 8$, $x = 8$, then $y =$ (32 or 2 or 30 or 12)

Second: Complete the following:

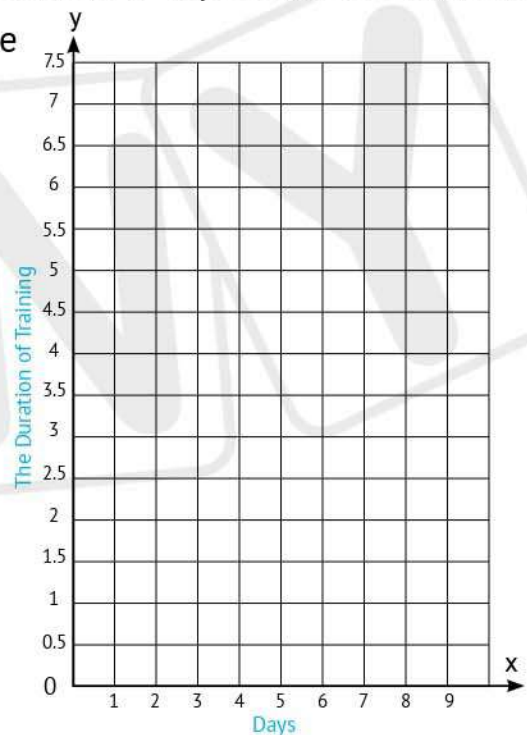
- a** In the equation " $8a = b$ " the independent variable is
- b** If the number of cars in the garage depends on the size of the garage, then:
1 the independent variable is
2 the dependent variable is
- c** If the independent variable is what Ahmed saves every day and the dependent variable is what he saves in one week, then depends on
- d** If the rule is "add 2.4", then
1 the equation is **2** if $x = 4$, then $y =$
- e** If the rule is "divide by 4" then
1 the equation is **2** if $x = 16$, then $y =$
- f** If the equation is $y = (15 + x) \div 4$, then :
1 the rule is **2** if $x = 5$, then $y =$

Third: Sameh trains for 6 hours divided into 4 days equally:

Complete the following table, where the variable " x " represents the number of days, and the variable " y " represents the duration of training in hours. Write an equation that shows the relationship between the variables " x " and " y ", and then represent it graphically.

x	1	2	3	4
y	.....	.....	.....	.....

The equation



Assessment 1

First: Choose the correct answer:

- a The GCF of 4 and 15 is (0 or 1 or 4 or 5)
- b The greatest non-negative integer is (1 or 0 or -1 or -2)
- c The integer that expresses: "Hossam moved three steps back" is (-3 or 3 or $x + 3$ or $x - 3$)
- d If the side length of a square is s cm, then the perimeter of the square = ($s + 4$ or $s - 4$ or $4s$ or $s \div 4$)
- e If $3^x = 27$, then the value of x = (2 or 3 or 9 or 24)

Second: Complete the following:

- a $6^2 \div 3^2 \times 2 =$
- b If $15 = 8 + a$, then $3a =$
- c If $y = 2x + 4$, $x = 3$ then $y =$
- d The inequality that represents all values "to the left of the number 2" on the number line is
- e The relationship that expresses the equation " $y = 5x$ " is

Third: Answer the following:

- 1 Diaa saves 150 pounds every month, so if the amount he saves in (x) months is (y) pounds, then:
 - a The equation that represents this situation is
 - b The independent variable is
 - c The dependent variable is
 - d What Diaa saves in a year is
- 2 The owner of a juice shop owns 5,950 paper cups. If he uses them within 17 days equally, how many cups did he use every day?

Assessment 2

First: Choose the correct answer:

- a 8 and are relatively prime numbers.
(6 or 15 or 20 or 12)
- b An integer between 2 and -2 is
(-1 or -3 or 3 or -4)
- c The number m plus 18 and the result divided by 3 =
($m + \frac{18}{3}$ or $\frac{m}{3} + 18$ or $3 \div (m + 18)$ or $(m + 18) \div 3$)
- d $3^4 =$
($4 \times 4 \times 4$ or $3 \times 3 \times 3 \times 3$ or 3×4 or $3 + 4$)
- e If $y = 27$, then $y = 9$
(18 or 3 or 27 or 9)

Second: Complete the following:

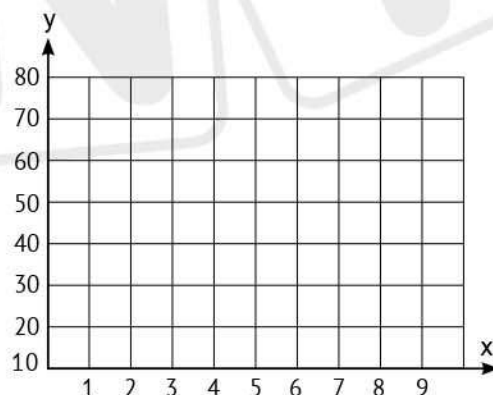
- a Prime numbers less than 10 are
- b $\times (3 + 6) = (9 \times \text{.....}) + (9 \times \text{.....})$
- c Integers between -3 and 2 are
- d Opposite numbers on a number line have absolute values (same - different)
- e The value of the expression " $3 \times (y^2 - 5)$ " when $y = 3$ is

Third: Answer the following:

Omar manufactures hats, producing 10 hats per day, the following table represents the number of working days (x) and the number of hats produced (y). Represent it graphically.

x	2	4	6	8
y	20	40	60	80

The equation



Assessment on Unit



First: Choose the correct answer:

- a** Statistical question
(it results in a lot of different answers **or** has one answer
or its answer is yes or no **or** its answer is one number)
- b** From the categorical data
(birthdates **or** ages **or** weights **or** favorite colors)
- c** From numerical data
(preferred colors **or** blood types **or** places of birth **or** ages)
- d** All of the following data are categorical, except for
(favorite foods **or** jobs **or** weight **or** eye colors)
- e** All of the following data are numerical, except
(temperatures **or** lengths **or** names **or** weights)
- f** The horizontal axis includes numerical periods in a
(dot plot **or** bar graph **or** double bar graph **or** histogram)
- g** A does not have a vertical axis.
(dot plot **or** bar graph **or** double bar graph **or** histogram)
- h** In a there is a graduated scale for the vertical axis.
(dot plot only **or** bar graph only
or both bar graph and histogram **or** histogram only)
- i** The maximum value of the values 8, 6, 8, 7, 2, 6, 3 is
(2 **or** 7 **or** 8 **or** 6)
- j** The upper quartile of the values 9, 3, 0, 4, 8, 1, 7 is
(9 **or** 4 **or** 1 **or** 8)

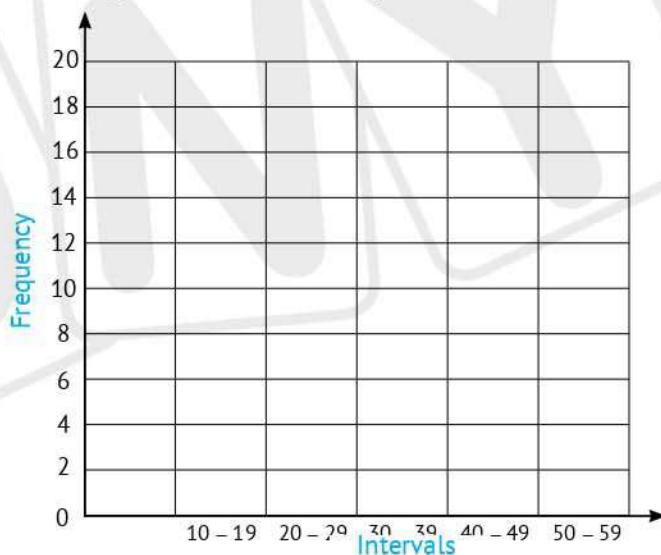
Second: Complete the following:

- a Types of questions are questions and questions.
- b Types of statistical data are data and data.
- c The monthly income of an institution's employees is from the data.
- d The number of letters of the first name of each student in the class, is from the data
- e The best graph to represent the number of pupils between the ages of 12 – 15 years is
- f The best graph to represent the number of studying hours for a student on Saturday is
- g The median of the values “9, 2, 8, 6” is
- h The minimum value of the values 2 , 9 , 1 , 1 , 8 , 5 is
- i The most appropriate graph to represent individual data and the number of data values present is
- j The most appropriate graph to represent peaks and gaps and aggregate data is

Third: Answer the following:

- 1 Draw the histogram of the following data , which represent the scores of 50 students.

Interval Grades	Frequency Number of Students
10 – 19	4
20 – 29	12
30 – 39	18
40 – 49	9
50 – 59	8

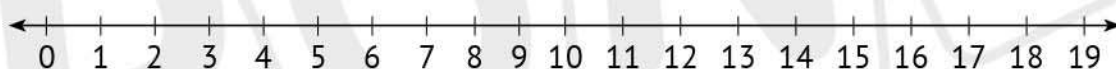


- 2 Draw the box plot for each of the following groups of values
(3, 8, 7, 2, 10, 12, 9, 2, 10, 9).

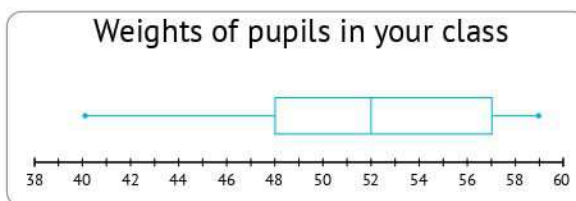
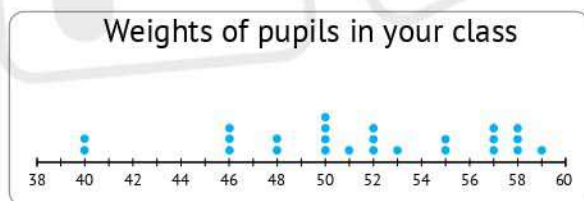
The order:

Minimum Value: Maximum Value: Median:

Upper Quartile: Lower Quartile:



- 3 The dots plot and the box plot below show the weights of a number of pupils in your class?



- a Answer the following, explaining the best graph(s) that helps you in the answer.

Question	Answer	Graph	
		Dot Plot	Box Plot
1 How many students weigh 57 kg?			
2 What is the median value?			
3 What is the height of the lightest pupil zone?			
4 What is the height of the heaviest students?			
5 How many students weigh more than 54 cm?			

- b Write two questions that can be answered using:

Dot plot

1 2

Box plot

1 2

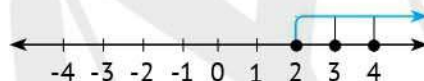
Assessment 1

First: Choose the correct answer:

- a The GCF of relatively prime numbers is
(0 or 1 or their sum or their product)
- b is neither a positive nor a negative number. (0 or 1 or -1 or 10)
- c All integers are numbers.
(counting or natural or even or rational)
- d The number of terms that make up the algebraic expression
“ $5x + 3y + 2$ ” is (2 or 3 or 5 or 6)
- e The inequality that represents all values less than or equal to -7 is
.....
($x > -7$ or $x < -7$ or $x \leq -7$ or $x \geq -7$)

Second: Complete the following:

- a to the power = 6^4
- b If a meal costs 65 pounds, what is the price of “b” meals of the same type
=
- c If $8m = 16$, then $2m + 3 =$
- d The inequality that represents positive integers is
- e The inequality represented on opposite
number line is



Third: Answer the following:

1 Use the opposite box plot to find:

- a Minimum Value:
- b Maximum Value:
- c Median:
- d Upper Quartile:
- e Lower Quartile:



2 Find the value of each of the following:

a $d^3 + 7$ If [$d = 3$]

=

b $37 - 4e$ If [$e = 2$]

=

Assessment 2

First: Choose the correct answer:

- a is a prime number. (55 or 11 or 22 or 33)
- b $-\frac{7}{4} > \dots\dots\dots$ ($\frac{7}{4}$ or $-1\frac{3}{4}$ or $\frac{8}{4}$ or $-\frac{8}{4}$)
- c The number of terms of algebraic expression " $8 + 3 \times y$ " is (2 or 3 or 4 or 5)
- d The expression representing:
 "half the difference between the number a and 7" is
 ($\frac{1}{2}a - 7$ or $\frac{1}{2}a + 7$ or $\frac{1}{2}(a - 7)$ or $\frac{1}{2}(a + 7)$)
- e 5^0 0^5 ($<$ or $=$ or $>$ or \geq)

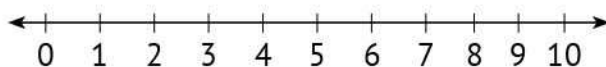
Second: Complete the following:

- a Do you like the red color? is a question.
- b The median of the values: 5, 7, 8, 3, 6 is
- c is the only prime even number.
- d The next number to 0 is
- e Like terms in the algebraic expression " $3b + 5a + 2b + 5$ " are

Third: Answer the following:

- a A travel agency wants to divide 3,556 passengers using minibuses, each one has 14 seats. How many minibuses can the travel agency use?

- b Draw the box plot for the following groups of values:
 (5, 8, 3, 2, 8, 6, 4).



Assessment

on Unit

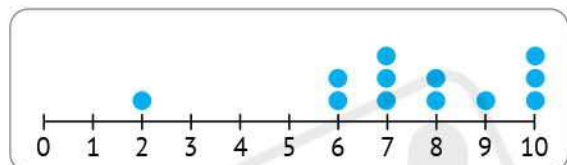
7



First: Choose the correct answer:

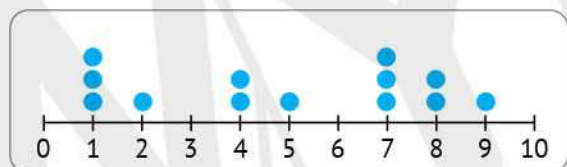
- a** If the mean of a set of values is 7 and the number of these values is 9, then the sum of the values is (16 or 63 or 2 or 9)
- b** If the mean of a set of values is 8 and the sum of these values is 48, then the number of these values is equal to (6 or 40 or 56 or 8)
- c** is not affected by outliers in the data set.
(The mean or The mode or The median or all of them)
- d** The range cannot be found using
(dot plot or histogram or box chart or all of them)
- e** is one of the measures of variability (spread).
(The mean or The median or The mode or The range)

- f** The correct description that applies to the opposite graph is the mean



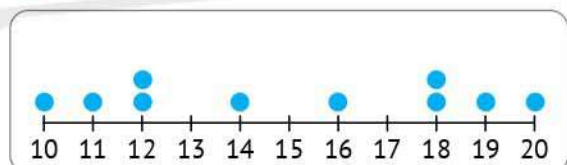
(increases or decreases or remains the same or The range)

- g** The best choice as a measure of central tendency for the values represented in the opposite graph is



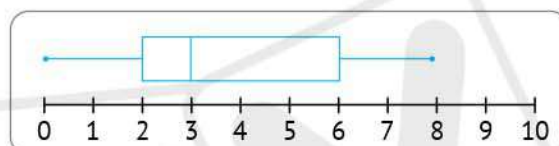
(the mean or the median or the mode or both the mean and the median)

- h** The mean of the values represented by opposite dot plot graph is



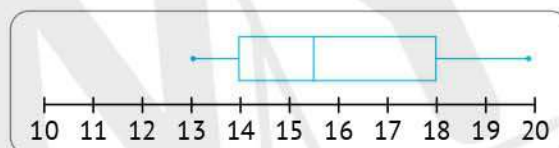
(15 or 20 or 14 or 16)

- i The median of the values represented by opposite box plot graph is



(2 or 3 or 6 or 8)

- j The range of values represented on the opposite box plot is



(4 or 18 or 5 or 7)

Second: Answer the following:

- a The mean of the values: 9, 7, 3, 1, 8, 2 is
- b The mode of the values 5, 3, 8, 7, 3, 5 is
- c The range for the values: 15, 5, 17, 3, 12 is
- d The outliers in the set of values: 5, 18, 3, 4, 7, 6 are
- e and are affected by the presence of outliers.

Third: Answer the following:

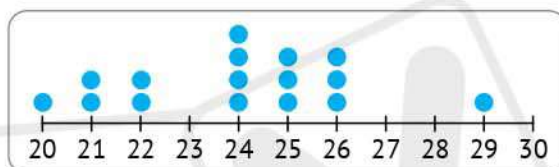
- 1 Using the corresponding graph (answer).

a The Mean:

b The Median:

c The Mode:

d The Range:



e Outliers:

- 2 The following table represents the temperatures recorded in a city in a week:

Day	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature	26°	25°	30°	25°	23°	24°	22°

Using the values shown table, find:

a The Mean:

b The Median:

c The Mode:

d The Range:

e Outliers:

Assessment 1

First: Choose the correct answer:

- a The GCF of 9 and 8 is (9 or 8 or 1 or 72)
- b $1\frac{3}{4} + 2\frac{1}{2} =$ ($4\frac{1}{4}$ or $3\frac{1}{4}$ or $3\frac{4}{6}$ or 4)
- c The rational number $-2\frac{3}{4}$ is between the two whole numbers (-1, -2 or -2, -3 or 1, 2 or 2, 3)
- d Twice the sum of 7 and x is ($2x + 7$ or $2(x + 7)$ or $27 + x$ or $2(2x + 7)$)
- e may use separate columns to represent the data. (Dot plots or Bar graph or Double bar graph or Histogram)

Second: Complete the following:

- a The smallest two-digit prime number is
- b The additive inverse of 5.9 is
- c The algebraic factor in the term " $2.5x$ " is
- d The inequality that represents all values "greater than -1 "
- e $z + 5 = m$: independent variable is, dependent variable is

Third: Answer the following:

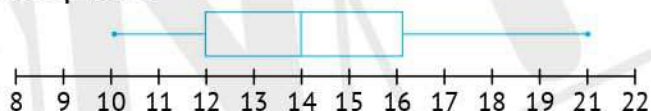
1 Use the following Box Plot to Complete:

a Maximum Value:

b Minimum Value:

c Median:

d Range:



2 Use the following Dot Plot to Complete:

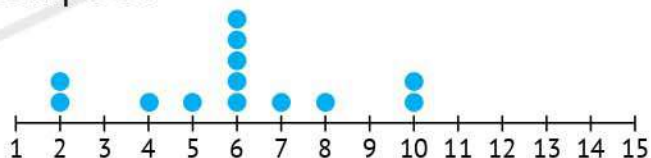
a Maximum Value:

b Minimum Value:

c Median:

d Mean:

e Range:



Assessment 2

First: Choose the correct answer:

- a $(2 \times 8) + (2 \times 3) = \dots\dots\dots$
 $(2 \times 8 \times 3 \text{ or } 2 + (8 \times 3) \text{ or } 2 \times (8 + 3) \text{ or } 2 \times 8 \times 2 \times 3)$
- b 5 is not a/an $\dots\dots\dots$.
(counting number or natural number or integer, or even number)
- c $5 \times 3 + 2^2 = \dots\dots\dots$ (35 or 19 or 51 or 17)
- d Which of the following values is a solution to the inequality " $x \geq 5$ "? $\dots\dots\dots$ (-5 or 4.59 or -25 or 6)
- e $\dots\dots\dots$ are categorical data.
(Heights or Ages or Weights or Favourite colors)

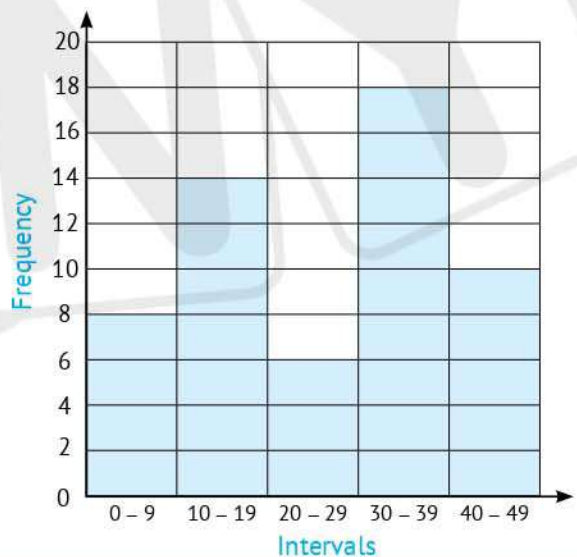
Second: Complete the following:

- a The prime number has only $\dots\dots\dots$ factor(s).
- b The integer that expresses:
"the temperature is 15 below zero" is $\dots\dots\dots$
- c If $5 = |m|$, then $m = \dots\dots\dots$ or $\dots\dots\dots$
- d The number of terms in the algebraic expression:
" $3x + 7y - 25$ " is $\dots\dots\dots$
- e Categorical statistical data, written in the form of $\dots\dots\dots$.

Third: Answer the following:

- 1 Complete the following table using the opposite histogram:

Intervals	Frequency
0 – 9	$\dots\dots\dots$
10 – 19	$\dots\dots\dots$
20 – 29	$\dots\dots\dots$
30 – 39	$\dots\dots\dots$
40 – 49	$\dots\dots\dots$



First: Choose the correct answer:

- 1 If $15 \times 27 = 405$, then $405 \div 15 = \dots\dots\dots$. (27 ☐ or 15 ☐ or 405 ☐ or 175)
- 2 If $2,054 = 26 \times 79$, then $2,060 \div 79 = 26$, and the remainder is $\dots\dots\dots$.
(14 ☐ or 41 ☐ or 6 ☐ or 16)
- 3 $\dots\dots\dots \div 11 = 14 \text{ R}3$ (158 ☐ or 157 ☐ or 156 ☐ or 154)
- 4 $\dots\dots\dots$ is a factor of all numbers. (0 ☐ or 1 ☐ or 2 ☐ or 3)
- 5 The prime number $\dots\dots\dots$. (has no factors ☐ or has only one factor ☐ or has two factors ☐ or has three factors)
- 6 The prime factors of 12 are $\dots\dots\dots$.
(3×4 ☐ or $2 \times 2 \times 3$ ☐ or 2×6 ☐ or 1×12)
- 7 If the prime factors of a number are $2 \times 2 \times 2$, then the number is $\dots\dots\dots$.
(8 ☐ or 4 ☐ or 6 ☐ or 222)
- 8 The LCM of any two prime numbers is $\dots\dots\dots$.
(the smallest number ☐ or 1 ☐ or their sum ☐ or their product)
- 9 The LCM of of a relatively prime number is $\dots\dots\dots$.
(the smallest number ☐ or 1 ☐ or their sum ☐ or their product)
- 10 The GCF of 4 and 15 is $\dots\dots\dots$. (0 ☐ or 1 ☐ or 4 ☐ or 5)
- 11 6 and $\dots\dots\dots$ are relatively prime numbers.
(4 ☐ or 15 ☐ or 35 ☐ or 20)
- 12 $\dots\dots\dots$ is a multiple of all numbers. (0 ☐ or 1 ☐ or 2 ☐ or 3)
- 13 $\dots\dots\dots$ is a prime number. (55 ☐ or 11 ☐ or 22 ☐ or 33)
- 14 0, 6, 8, 2 are $\dots\dots\dots$ numbers.
(even ☐ or odd ☐ or prime ☐ or counting)
- 15 The prime factors of 20 are $\dots\dots\dots$.
(2×10 ☐ or 5×4 ☐ or $2 \times 2 \times 5$ ☐ or 1×20)

Final Revision

- 16 If the prime factors of a number are $2 \times 3 \times 3$, then the number is
(18 or 9 or 11 or 233)
- 17 The greatest common factor of any two prime numbers is
(0 or 1 or their sum or their product)
- 18 The least common multiple of two prime numbers is
(smallest number or 1 or their sum or their product)
- 19 The least common multiple of a relatively prime number is
(greatest number or 1 or their sum or their product)
- 20 The least common multiple of 8 and 5 is
(8 or 5 or 13 or 40)
- 21 The greatest common factor of 6 and 25 is
(1 or 2 or 4 or 5)
- 22 8 and are relatively prime numbers.
(4 or 24 or 35 or 20)
- 23 12 and are relatively prime numbers.
(8 or 25 or 36 or 18)
- 24 The greatest common factor of a number whose prime factors are 2 and 5, and a number whose factors are 3 and 7 is
(0 or 10 or 1 or 210)
- 25 is a factor of all numbers.
(0 or 1 or 2 or 3)
- 26 $6 \times (7 + 5) =$
($(6 \times 7) + (6 \times 5)$ or $6 \times 7 + 5$ or $6 \times 7 \times 5$ or $(6 + 7) \times (6 + 5)$)
- 27 $(4 \times 9) + (4 \times 3) =$
($4 \times 9 \times 3$ or $(4 \times 9) + 3$ or $4 + (9 \times 3)$ or $4 \times (9 + 3)$)
- 28 $1\frac{3}{4} + 2\frac{1}{4} =$
($4\frac{1}{4}$ or $3\frac{1}{4}$ or $3\frac{4}{6}$ or 4)
- 29 -3 is located to the right of on the number line.
(-4 or 4 or -2 or 2)
- 30 The number that comes just before is -1. (-2 or 2 or 0 or 1)

- 31 $-9 > \dots\dots\dots$ (-15 or 8 or -8 or 10)
- 32 The opposite of -12 is $\dots\dots\dots$ (-12 or 12 or 1 or 2)
- 33 $\dots\dots\dots$ is neither a positive nor a negative number. (0 or 1 or -1 or 10)
- 34 The opposite of $5 > \dots\dots\dots$ (-4 or 4 or -6 or 6)
- 35 The largest negative integer is $\dots\dots\dots$ (-1 or 1 or -100 or 0)
- 36 The largest non-positive integer is $\dots\dots\dots$ (-1 or 1 or -100 or 0)
- 37 All negative numbers $\dots\dots\dots$ zero. ($<$ or $=$ or $>$ or \leq)
- 38 All positive numbers $\dots\dots\dots$ zero. ($<$ or $=$ or $>$ or \leq)
- 39 The integer that expresses (the depth of a well of 5 meters) is $\dots\dots\dots$.
(-5 or 5 or -10 or 10)
- 40 An integer between 2 and -2 is $\dots\dots\dots$ (-1 or -3 or 3 or -4)
- 41 The number just after -9 is $\dots\dots\dots$ (-10 or -8 or 10 or 8)
- 42 -25 \square -12 ($<$ or $=$ or $>$ or \leq)
- 43 $6 < \dots\dots\dots$ (-8 or 8 or -9 or -7)
- 44 -2.5 is a/an $\dots\dots\dots$
(counting number or natural number or integer or rational number)
- 45 5 is not a/an $\dots\dots\dots$.
(counting number or natural number or integer or even number)
- 46 0 is a/an $\dots\dots\dots$ number.
(counting or natural or negative integer or odd)
- 47 The opposite of $-\frac{3}{4}$ is $\dots\dots\dots$. ($\frac{3}{4}$ or $-\frac{4}{3}$ or $\frac{4}{3}$ or $1\frac{1}{3}$)
- 48 -6 in the form $\frac{a}{b}$ is $\dots\dots\dots$. ($-\frac{1}{6}$ or $-\frac{6}{1}$ or $\frac{1}{6}$ or $-\frac{6}{1}$)
- 49 Additive inverse of a number $\frac{3}{5}$ \square $-\frac{5}{3}$ ($<$ or $=$ or $>$ or \leq)
- 50 $-\frac{7}{4} > \dots\dots\dots$ ($\frac{7}{4}$ or $-1\frac{3}{4}$ or $\frac{8}{4}$ or $-\frac{8}{4}$)
- 51 -2 is a/an $\dots\dots\dots$.
(counting number or natural number or negative integer or odd number)

Final Revision

- 52 All integers are numbers.
(counting or natural or even or rational)
- 53 The additive inverse of -5 is
($\frac{1}{5}$ or $-\frac{1}{5}$ or -5 or 5)
- 54 Rational number $-2\frac{3}{5}$ is between
($-1, -2$ or $-2, -3$ or $1, 2$ or $2, 3$)
- 55 -7 is to the right of on the number line.
(-8 or 8 or -6 or 6)
- 56 $|-3.7| =$
(3.7 or -3.7 or 37 or -37)
- 57 The absolute value of "zero" is
(10 or 0 or -1 or 1)
- 58 The absolute value of 2.7 is
(-2.7 or 2.7 or 27 or -27)
- 59 The larger the absolute value, the number zero.
(closer to or farther from or equal to)
- 60 The algebraic term " $\frac{1}{5}x$ " has factors.
(1 or 2 or 3 or 4)
- 61 In the algebraic term " $-3xy$ " the coefficient is
(y or x or 3 or -3)
- 62 The algebraic factor in the algebraic term " $\frac{3}{8}x$ " is
(x or 8 or 3 or $\frac{3}{8}$)
- 63 The number of terms of " $7a - 2b$ " is
(2 or 3 or 5 or 6)
- 64 Like terms for the algebraic expression " $5 + 5y + 2y$ " are
($5, 5y$ or $5y, 2y$ or $5, 2y$ or $5, 5y, 2y$)
- 65 Like terms for the algebraic expression " $2 + 3b + 2a$ " are
($2, 3b$ or $2, 2a$ or $3b + 2a$ or none)
- 66 In the algebraic expression " $3y + 9$ " the absolute term is
(9 or 3 or y or $3y$)
- 67 If the height of the school building is " m " meters and the height of the tree adjacent to this building is 10 meters less than its height, then height of the tree is meters.
($m + 10$ or $m - 10$ or $10m$ or $\frac{m}{10}$)

- 68 Ahmed and Tamer have 60 pounds, if what Ahmed has is " x " pounds, then what Tamer has is pounds
($60 + x$ or $60 - x$ or $60x$ or $60 \div x$)
- 69 If we subtract 5 from the number " x ", the result is
($x + 5$ or $x - 5$ or $5 - x$ or $5x$)
- 70 The algebraic term is " $5ab$ " formed from factors.
(1 or 2 or 3 or 4)
- 71 Ziyad saved up " x " pounds and his father gave him 10 pounds so that he would be with him
($x - 10$ or $x + 10$ or $10x$ or $10 - x$)
- 72 The algebraic expression representing (subtracting 3 from twice the number " x ") is
($x - 3$ or $2x - 3$ or $3x + 2$ or $5x$)
- 73 The algebraic expression representing (half the difference between the number " a " and 7) is
($\frac{1}{2}a - 7$ or $\frac{1}{2}a + 7$ or $\frac{1}{2}(a - 7)$ or $\frac{1}{2}(a + 7)$)
- 74 If Basim is " n " years old now, how old will he be after 7 years?
($n - 7$ or $n + 7$ or $7 \div n$ or $7n$)
- 75 Which of the following operations expresses the mathematical expression "double the number plus 4"?
($+$, $-$ or \times , $-$ or \times , $+$ or \times , \div)
- 76 A square of side length " s " cm has a perimeter of cm.
($s + 4$ or $s \div 4$ or $s - 4$ or $4s$)
- 77 If the price of one book is 15 pounds, how much is the price of " b " number of books?
($15b$ or $15 - b$ or $b - 15$ or $b + 15$)
- 78 $4^2 =$
(4×2 or 4×4 or $4 + 2$ or $4 + 4$)
- 79 $3^0 =$
(3 or 0 or 1 or 3×0)
- 80 $1^5 =$
(1×5 or $1 + 5$ or 1 or 0)
- 81 $2 \times 2 \times 2 \times 2 \times 2 =$
(2^5 or 5^2 or 2×5 or $2 + 5$)

Final Revision

82 $4^{\dots} = 1$ (0 or 1 or 2 or 5)

83 $2^4 \square 4^2$ (< or = or > or \leq)

84 $7^0 \square 0^7$ (< or = or > or \leq)

85 $5 \times 3 + 2^2 = \dots$ (35 or 19 or 51 or 17)

86 $3^2 + 3^2 + 3^2 = \dots$ (3^6 or 9^2 or 3^3 or 9^6)

87 If the price of one shirt is 120 Egyptian pounds, then the price of "m" number of shirts is (120 m or $120 \div m$ or $120 + m$ or $120 - m$)

88 If Hanan saves "d" pound daily for 5 days, then her father gives her 20 pounds, so the amount that Hanan has now is

($5 + 20d$ or $20 - 5d$ or $5d + 20$ or $5 \times (d + 20)$)

89 The value of the expression $a^2 + 2 \times 3$, If $a = 3$ is
(15 or 33 or 12 or 24)

90 If $a + 8 = 15$, then $a = \dots$ (7 or 15 or 8 or 23)

91 If $b = 6$, then $b - \dots = 4$ (10 or 4 or 2 or 6)

92 If $5x = 40$, then $x = \dots$ (35 or 45 or 8 or 200)

93 If $y = 16$, then $\frac{y}{\dots} = 2$. (3 or 8 or 12 or 4)

94 The inequality that represents all values "greater than -1" is
($x > -1$ or $x < -1$ or $x \leq -1$ or $x \geq -1$)

95 The inequality that represents all values to the left of 5 on the number line is
($x > 5$ or $x < 5$ or $x \leq 5$ or $x \geq 5$)

96 The inequality that represents all values "less than or equal to -7" is
($x > -7$ or $x < -7$ or $x \leq -7$ or $x \geq -7$)

97 The graph of the inequalities " $x > 3$ " and " $x < 3$ " on the number line are similar in that
(3 doesn't belong to any of them

or both include all values to the left of the number 3

or there is a common point between them

or each of them includes all the values to the right of the number 3)

98 The graph of the inequalities " $x < 4$ " and " $x \leq 4$ " on the number line are similar in that

(4 doesn't belong to any of them **or** they include all values to the left of 4

or there is "a" common point between them

or each of them includes all the values to the right of the number 4)

99 Which of the following values is a solution to the inequality " $x < 9$ "?

(10 **or** 9.1 **or** -9.5 **or** 9)

100 Which of the following values is a solution to the inequality " $x \geq 5$ "?

(-5 **or** 4.59 **or** -25 **or** 6)

101 The inequality for which all negative numbers are

($x > 0$ **or** $x < 0$ **or** $x \leq 0$ **or** $x \geq 0$)

102 In " $u = 3 \div w$ " the independent variable is (w **or** u **or** 3 **or** $\frac{w}{3}$)

103 In " $a = 5d$ ", the dependent variable is (5 **or** a **or** d **or** $5d$)

104 If the amount of fuel consumed by the car depends on the distance traveled, then the independent variable is the

(fuel amount **or** distance traveled **or** traveled time **or** temperature)

105 If the dependent variable is the student's score in the exam, then the independent variable is

(the type of pen used in the solution **or** the age of the student

or the number of correct answers **or** the number of questions in the exam)

106 The equation that expresses "subtract from 9" is

($y = x - 9$ **or** $y = 9 - x$ **or** $y - x = 9$ **or** $y = 9x$)

107 The equation that expresses "multiply by 2 and then add 5" is

($y = 5x + 2$ **or** $y = 2(x + 5)$ **or** $y = 5(x + 2)$ **or** $y = 2x + 5$)

108 The relation that represents the equation " $y = \frac{1}{3}x$ " is

(divide by 3 **or** multiply by 3 **or** divide by $\frac{1}{3}$ **or** subtract $\frac{1}{3}$)

- 109 The relation that represents the equation " $y = (x - 3) \div 2$ " is
 (divide by 2, then subtract 3 or subtract 3, then divide by 2
 or divide by 3, then subtract 2 or subtract 2, then divide by 3)
- 110 $y = 6x + 4$, If $x = 3$ then $y =$ (10 or 22 or 18 or 67)
- 111 $y = \frac{1}{4}x - 2$, If $x = 8$ then $y =$ (0 or 2 or 6 or 30)
- 112 Statistical question
 (results in a lot of different answers or its answer is yes or no
 or has one answer or its answer is one number)
- 113 are categorical data.
 (Dates of birth or Ages or Weights or Favorite colors)
- 114 are categorical data.
 (Numbers of students in each class or Test scores
 or Numbers of family members or Favourite TV shows)
- 115 The horizontal axis includes numerical periods in
 (dot plot or bar graph or double bar graph or histogram)
- 116 does not have a vertical axis.
 (Dot plot or Bar graph or Double bar graph or Histogram)
- 117 uses separate columns to represent the data.
 (Dot plot or Bar graph or Double bar graph or Histogram)
- 118 has horizontal axis.
 (Bar graph or Double bar graph or Histogram or All of the previous)
- 119 In the dot plot, (columns are used to represent data
 or there is no need for a horizontal axis
 or each value is represented by a point
 or data is displayed grouped in intervals)
- 120 In the bar graph
 (each bar represents a number or one categorical data
 or it does not need a vertical axis or the bars must touched 0
 or each piece of information is represented by a dot)

121 In the histogram

(it does not need a vertical axis or the bars must touch
or data is shown above the number line or all bars are evenly spaced)

122 In each of the bar graphs and histograms

(bars are used to represent data or each bar represents an interval
or each bar represents one number or The data is shown above the number line)

123 In the there is a graduated scale for the vertical axis.

(dot plots only or bar graph only
or histogram only or both of bar graph and histogram)

124 A may be used to display numerical data.

(dot plot or bar graph or histogram or all of the previous)

125 The best graph to represent the number of pupils whose height ranges from 150 – 160 cm is the

(dot plots or bar graph or histogram or all of the previous)

126 The best graph to represent the number of students absent on a Sunday is

(dot plots or bar graph or histogram or all of the previous)

127 A has two axes, horizontal and vertical.

(bar graph or double bar graph or histogram or all of the previous)

128 The bar graph (can display numerical and categorical data

or can display only numerical data
or can display only categorical data)

129 The mean of the values 45, 15, 40, 70, 80 is

(40 or 45 or 50 or 60)

130 If the mean of the values 12, 15, x , 8 is 10 then the value of " x " is

(40 or 5 or 20 or 10)

131 If the sum of 8 values equals 48, then the mean of these values is

(40 or 56 or 24 or 6)

Final Revision

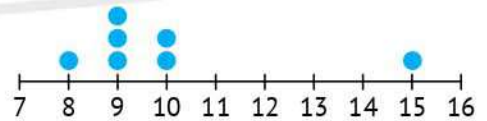
132 If the sum of a set of values is 36, and the mean of these values is 6, then the number of these values is (6 or 42 or 30 or 216)

133 The median of the values: 4, 9, 7, 1, 1, 2 is (4 or 2 or 3 or 24)

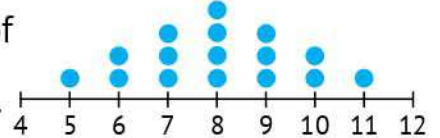
134 If the mean of Manal and Siham's ages is 7 years, and Manal's age is 8 years, then Siham's age is years. (6 or 7 or 8 or 15)

135 Values "5, 3, 2, 5, 2, 7" has
(no mode or one mode or two modes or three modes)

136 The correct description that applies to opposite graph is the mean
(increases or decreases or remains the same)



137 will be the best choice as a measure of the central tendency in the opposite graph.
(The mean or The median or The mode or Both mean and median)

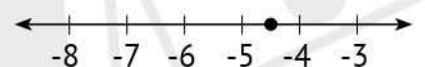


138 If the range of a set of values is 11 and the smallest value is 7, then the largest value is (4 or 18 or 77 or 70)

139 All of the following are measures of the center, except
(mean or median or mode or range)

140 The range cannot be found using
(dot plot or box plot or histogram or bar chart)

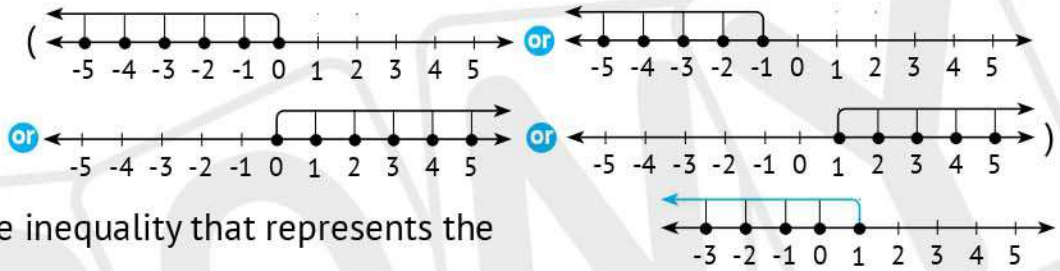
141 The rational number represented on the opposite number line is
($4\frac{2}{3}$ or $5\frac{2}{3}$ or $-4\frac{2}{3}$ or $-5\frac{2}{3}$)



142 The rational number represented on the opposite number line is
(0.5 or -0.5 or 1.5 or -1.5)



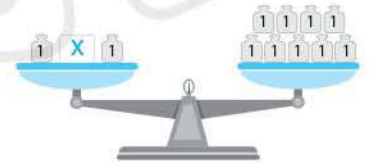
143 The graph representing the equation " $x < 0$ " is



144 The inequality that represents the opposite model is

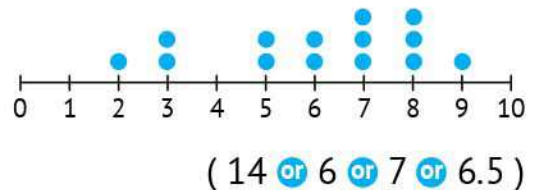
($x > 2$ or $x < 2$ or $x \geq 2$ or $x \leq 2$)

145 The equation that represents the opposite model is



($x + 2 = 9$ or $2x = 9$ or $x - 2 = 9$ or $x \div 2 = 9$)

146 The mean of the values represented on the opposite dot plot is



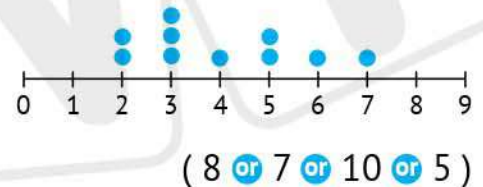
147 The median of the values represented on the opposite dot plot is

(15 or 8 or 9 or 10)

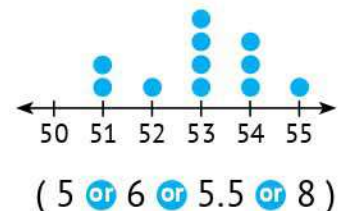
148 The mode of the values represented on the opposite dot plot is



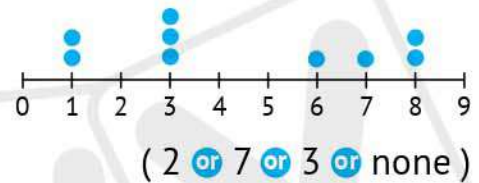
149 The range of the values represented on the opposite dot plot is



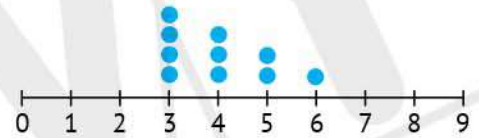
150 The mode of the values represented on the opposite dot plot is



- 151 The outliers of the values represented on the opposite dot plot is

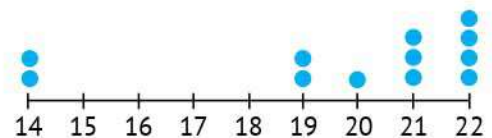


- 152 will be the best choice as a measure of the central tendency in the opposite graph.



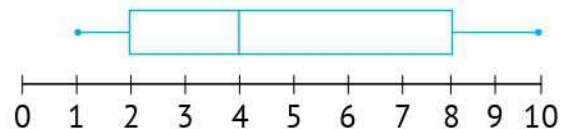
(Mean or Mode or Median or Range)

- 153 The correct description that applies on the opposite graph is the mean



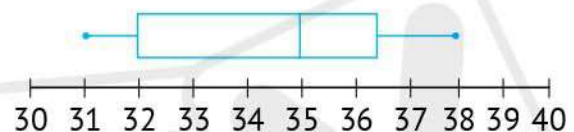
(increases or decreases or remains the same)

- 154 The range of the values represented on the opposite box plot is



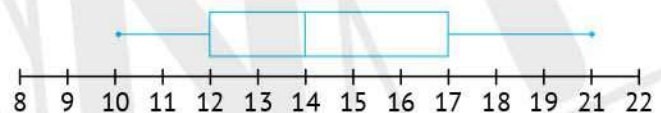
(10 or 2 or 9 or 8)

- 155 The median of the values represented on the opposite box plot is



(31 or 32 or 34 or 38)

- 156 The lower quartile of the values represented on the opposite box plot is



(10 or 12 or 14 or 17)

Second: Complete the following:

- 1 If $13 \times 48 = 624$, then $624 \div 13 = \dots\dots\dots$.
- 2 If $976 = 61 \times 16$, then $985 \div 61 = 16$, and the remainder $\dots\dots\dots$.
- 3 If $2,000 \div 51 = 39$ and the remainder is 11, then $51 \times 39 = \dots\dots\dots$.
- 4 The number that, if divided by 35, the quotient will be 139, and the remainder is 21, is $\dots\dots\dots$.
- 5 The prime number has $\dots\dots\dots$ only factors.
- 6 All prime numbers are odd numbers, except $\dots\dots\dots$ is an even.
- 7 $\dots\dots\dots$ is the smallest prime number.
- 8 $\dots\dots\dots$ is the smallest odd prime number.
- 9 The smallest two-digit prime number is $\dots\dots\dots$.
- 10 Prime numbers less than 10 are $\dots\dots\dots$.
- 11 $\dots\dots\dots$ is a number whose prime factors are 2, 5, 7
- 12 The GCF of the two relatively prime number is $\dots\dots\dots$.
- 13 The LCM of the two relatively prime number is $\dots\dots\dots$.
- 14 The $\dots\dots\dots$ number has only 2 factors.
- 15 All prime numbers are odd numbers, except $\dots\dots\dots$ is an even number.
- 16 $\dots\dots\dots$ is the only prime even number.
- 17 $\dots\dots\dots$ is a number greater than one, and it has only two factors.
- 18 The prime factors of 28 are $\dots\dots\dots$.
- 19 Two numbers are relatively prime if their greatest common factor is $\dots\dots\dots$.
- 20 The least common multiple of two prime numbers is $\dots\dots\dots$.
- 21 $5 \times (3 + 6) = (\dots\dots \times \dots\dots) + (\dots\dots \times \dots\dots)$
- 22 $\dots\dots \times (\dots\dots + \dots\dots) = (7 \times 2) + (7 \times 4)$
- 23 $8 \times (\dots\dots + \dots\dots) = (\dots\dots \times 9) + (\dots\dots \times 2)$
- 24 $\dots\dots \times (4 + 6) = (9 \times \dots\dots) + (9 \times \dots\dots)$
- 25 The number and its opposite are on $\dots\dots\dots$ from zero, but on two $\dots\dots\dots$ sides on the number line.

Final Revision

- 26 The opposite of "10" is the number
- 27 The additive inverse of 8 is
- 28 The additive inverse of is itself.
- 29 The smallest number in counting numbers is
- 30 The smallest counting number is
- 31 The smallest natural number is
- 32 The smallest positive integer is
- 33 The greatest non-positive integer is
- 34 The greatest negative integer is
- 35 The smallest non-negative integer is
- 36 Integers between -3 and 2 are
- 37 $5, 4, 3, 2, 1, 0, \dots$
- 38 $-5, -4, -3, -2, \dots, \dots, \dots, \dots$
- 39 Rational number $-\frac{3}{2}$ in the decimal form =
- 40 All counting numbers are also numbers, and numbers.
- 41 The next number to -8 is
- 42 The rational number " -7.2 " lies between and
- 43 The rational number " -5.6 " lies between and on the number line.
- 44 All natural numbers are numbers and numbers.
- 45 All integers are numbers.
- 46 -2.5 in the form $\frac{a}{b}$ is (in its simplest form).
- 47 The rational number $-\frac{7}{4}$ in the decimal form is
- 48 $|-5| = \dots\dots\dots$
- 49 $|\frac{7}{9}| = \dots\dots\dots$
- 50 $|- \frac{3}{4}| = \dots\dots\dots$

- 51 $|0.03| = \dots\dots\dots$
- 52 $|-0.7| = \dots\dots\dots$
- 53 If $5 = |a|$, then $a = \dots\dots\dots$ or $\dots\dots\dots$
- 54 If $b = |-7|$, then $b = \dots\dots\dots$
- 55 If $n = |9|$, then $n = \dots\dots\dots$
- 56 $-|-4| = \dots\dots\dots$
- 57 $|9| + |-9| = \dots\dots\dots$
- 58 Opposite numbers on the number line have $\dots\dots\dots$ absolute values (equal - different).
- 59 The algebraic factor in " $2.5x$ " is $\dots\dots\dots$.
- 60 The coefficient in the algebraic term " $3xy$ " is $\dots\dots\dots$.
- 61 The number of terms in the algebraic expression $3xy - 25$ is $\dots\dots\dots$.
- 62 Like terms in the algebraic expression $6x + 6y + 2x + 6$ are $\dots\dots\dots$.
- 63 The absolute term in the algebraic expression $5b + 3.2$ is $\dots\dots\dots$.
- 64 The algebraic expression that expresses "three times b " is $\dots\dots\dots$.
- 65 The algebraic expression that expresses adding " z " to 36 is $\dots\dots\dots$.
- 66 The algebraic expression that expresses 5 less than " x " is $\dots\dots\dots$.
- 67 Baher has " m " stickers in the sticker book and then puts up 12 more stickers. So he has now $\dots\dots\dots$.
- 68 Two numbers their sum is 12, one of which is d , so the other number is ($\dots\dots\dots$)
- 69 Salah saves " z " pounds per day. So he saves $\dots\dots\dots$ pounds in a week.
- 70 The verbal form for the algebraic expression $5a + 7$ is $\dots\dots\dots$.
- 71 If the side length of " a " square is " s " cm, then the perimeter of the square = $\dots\dots\dots$.
- 72 The value of the expression $9x$ if ($x = 5$) is $\dots\dots\dots$.
- 73 The value of the expression r^2 if ($r = 9$) is $\dots\dots\dots$.
- 74 The algebraic expressions " $2x + 3$ " and " $2(x + 1)$ " are $\dots\dots\dots$ expressions. (Equal, Not equal)

Final Revision

- 75 The value of the expression $3(y^2 + 2)$ (if $y = 3$) is
- 76 Two integers their sum is s , one of which is 10, then the other number is
- 77 In the algebraic term $7 \times y$, the coefficient is
- 78 Like terms for the algebraic expression $3n + 3 + 2n$ are
- 79 The algebraic expression that represents "twice of subtracting 5 from the number w " is
- 80 The value of the algebraic expression $4 \times (y^3 - 7)$, If $y = 3$ is
- 81 In 5^7 : 5 is called and 7 is called
- 82 In 4 is called the base and 2 is called the exponent.
- 83 Six cubed =
- 84 Seven squared =
- 85 Four to the power 5
- 86 to the power = 6^4
- 87 If $3^x = 81$, then the value of x is
- 88 If $y^3 = 64$, then the value of y is
- 89 $3 \times 3 \times 3 \times 3 \times 3 \times 3 =$
- 90 $5^{\dots\dots\dots} = 1$
- 91 $4^{\dots\dots\dots} = 4$
- 92 $8 \times 8 \times 8 = \dots^3$
- 93 $7^2 = \dots \times \dots$
- 94 $6^2 \div 3^2 \times 2 = \dots$
- 95 Using the opposite model:
The equation is
 $x =$
- 96 If $x + 3 = 8$, then $x =$
- 97 If $y - 2 = 9$, then $y =$



- 98 If $8m = 16$, then $m =$
- 99 If $\frac{1}{3}n = 3$, then $n =$
- 100 If $a = 3$, then $a +$ = 7
- 101 If $b = 5$, then $b -$ = 2
- 102 If $d = 4$, then $\times d = 20$
- 103 If $k = 12$, then $k \div$ = 4
- 104 The inequality that represents all values less than -6 is
- 105 The similarities between the graphs of the two algebraic expressions $x = 6$ and $x \geq 6$ are
- 106 The inequality that represents all values greater than -1:
- 107 The inequality that represents all values less than 2:
- 108 The inequality that represents all values to the right of -9 on the number line are:
- 109 $e = (8 - r)$ independent variable is, dependent variable is
- 110 In the equation $(m - 8) = a$, the dependent variable is
- 111 If the price of books depends on the number of books purchased, then:
The independent variable is
The dependent variable is
- 112 In the equation $m - 8 = a$, the independent variable is
- 113 The equation that represents the relationship between the number of months " x " and the total money she saved " y " is $y = 50x$, then.
-The independent variable is
-The dependent variable is
-The money she saved in 6 months is
- 114 If the equation is " $y = x + 4$ ", then the rule is
- 115 The mean of the values "8, 9, 2, 7, 6, 4, 6" is
- 116 The median of the values "8, 2, 10, 1, 3, 7, 2" is
- 117 The mode of the values "9, 2, 8, 3, 7, 3" is

Final Revision

- 118 Range = -
- 119 It is easier to find the range using a or
- 120 The range cannot be found using
- 121 The range for the values “9, 2, 4, 1, 8, 5” is
- 122 If the largest value is 15 and the least value is 3, then
the range =
- 123 If the range of a set of values is 12 and the smallest value is 5, then
the largest value is
- 124 If the range of a set of values is 25 and the largest value is 52, then
the smallest value is
- 125 and are affected by the presence of outliers.
- 126 If the mean of the values is 3, 4, 6, x , 7 is 6, then the value of x is
- 127 The outliers in the set of values 5, 18, 3, 4, 7, 6 are

Third: Answer the following:

1 Find :

a

$$\begin{array}{r} \text{.....} \\ 3 \overline{) 285} \end{array}$$

b

$$\begin{array}{r} \text{.....} \\ 6 \overline{) 1,728} \end{array}$$

c

$$\begin{array}{r} \text{.....} \\ 6 \overline{) 2,657} \end{array}$$

d

$$\begin{array}{r} 31 \overline{) 1,519} \end{array}$$

e

$$\begin{array}{r} 23 \overline{) 14,484} \end{array}$$

f

$$\begin{array}{r} 42 \overline{) 26,544} \end{array}$$

2 Solve the following problems using **standard division algorithm**:

- a Rana sells in her cafe cakes baked in one of the bakeries. Rana received an order for the delivery of 420 cakes, Rana placed the cakes in bags and in each bag contained 12 cakes . Find the number of bags?

- b A baker prepared 252 pieces of baklava at a party.
If each tray contained 12 pieces of baklava,
how many trays will be needed to prepare all the baklavas?

- c If the total price of 25 books is 2,825 pounds,
what is the price of 36 books ?

Final Revision

- d** The school library received 45 boxes, of 84 books each.

These books will be distributed among 12 cupboards.

How many books will be there in each cupboard?

- e** Hazem has 5 packs of red pencils, each with 32 pencils, and 4 boxes of blue pencils each pack has 16 pencils.

He wants to distribute them evenly to 8 of his friends.

How many pencils will each friend get?

- f** A school has 604 boys and 521 girls, it is intended to divide the boys and girls equally into 25 classes in the school. How many students will be in each class?

- 3** Complete using the opposite Venn diagram:

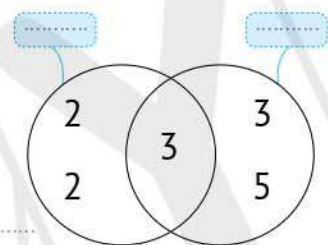
a The two numbers are and

b The common prime factors are

c The GCF is

d The LCM is

e Are the two numbers relatively prime? (Yes or No)



- 4** Complete using the opposite Venn diagram:

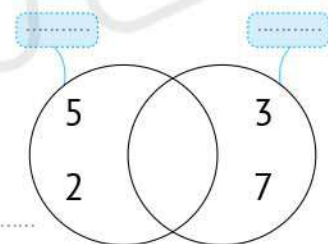
a The two numbers are and

b The common prime factors are

c The GCF is

d The LCM is

e Are the two numbers relatively prime? (Yes or No)



- 5 Ahmed wants to grow 20 jasmine plants and 30 phil plants in his garden. Ahmed wants to plant these plants in basins so that each basin contains the same number of the two types of plants.

Write a numerical expression that represents the largest number of ponds he can plant.

.....

.....

.....

=

=

GCF =

- 6 A merchant has 16 kg of oranges and 24 kg of apples, so if the merchant wants to divide the oranges and apples in bags of the same mass, what is the largest number of bags that can be made for each type of fruit? Does each bag have the same mass? How many kilograms of oranges will each bag contain? How many kilograms of apples will each bag contain?

.....

.....

.....

=

=

GCF =

- 7 Mahmoud wanted to divide 28 pens and 42 notebooks into groups, so that each group contained the same number of tools. What is the largest number of groups that can be configured for each type of instrument to have for each same number group? How many pens are in each group? What is the number of notebooks in each group?

.....

.....

.....

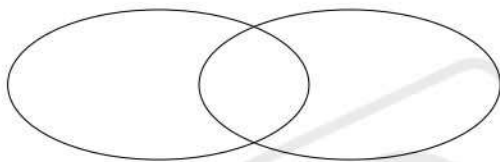
=

=

GCF =

Final Revision

8 Find the GCF and LCM using Venn diagram for numbers 24 and 16:



GCF =

LCM =

24 =

16 =

9 Find the result:

a $4\frac{1}{4} + 2\frac{7}{12} =$

b $7\frac{1}{5} + 3\frac{1}{4} =$

c $4\frac{2}{5} - 3\frac{1}{4} =$

d $7\frac{1}{2} - 3\frac{3}{4} =$

10 Ahmed has $5\frac{3}{4}$ LE and Tamer has $15\frac{1}{2}$ LE. Find out the total sum of what they have altogether.

.....

.....

11 Shaima bought a pen for $9\frac{1}{2}$ pounds, a ruler for $5\frac{1}{4}$ pounds, and a notebook for 4 pounds. How much did Shaima pay?

.....

.....

12 Wael collected $3\frac{3}{4}$ kilograms of dates and gave $2\frac{1}{5}$ kilograms to his friend. How many kilograms left with Wael?

.....

.....

- 13 A road is 15 km long. it's paved in three stages; $6\frac{2}{5}$ km in the first stage, $4\frac{1}{2}$ km in the second stage. How long is the distance paved in the third stage?
-
-

- 14 Compare using ($<$, $=$, or $>$):

a 2 3 b $-6\frac{7}{8}$ -5 c -8 5

d $|-1.5|$ -1.5 e $|3\frac{1}{4}|$ $|4\frac{1}{3}|$ f -3.8 -1.8

g 5.07 $|-5.07|$ h $|-2.5|$ $|-3.6|$ i -0.7 $|-0.7|$

- 15 Arrange each group of the following numbers in **ascending** and **descending** order:

a $8, -17, |-3|, -9, |12|$

Ascending order:,,,,

Descending order:,,,,

b $-\frac{3}{4}, \frac{5}{8}, \frac{1}{2}, \frac{3}{4}, \frac{1}{4}$

Ascending order:,,,,

Descending order:,,,,

Final Revision

16 Follow the order of performing operations, then find the value of each of the following:

a $48 \div 8 \times 2$

=
=

b $4 + 5 \times 6$

=
=

c $15 \div 3 + 7$

=
=

d $5 \times 2 + 3 \times 4$

=
=

e $(3 + 6) \times 2$

=
=

f $[3 \times (9 - 4)] - 10$

=
=

g $3^2 + 2 \times 5$

=
=

h $3 \times 2^3 \div 12$

=
=

i $(2^4 - 1) \div (3^2 - 4)$

=
=

17 Find the value of the algebraic expression in each of the following:

a $4a - 15 \div 3$ [If $a = 2$]

=
=
=

b $(6b + 3) \div 7$ [If $b = 3$]

=
=
=

c $g^2 - 32 \div 8$ [If $g = 5$]

=
=
=

d $3^b + 6 \times (b^2 - 3)$ [If $b = 2$]

=
=
=

18 Write a mathematical expression that expresses each of the following situation:

a Bassem runs one kilometer in 15 minutes.

The number of kilometers that Bassem runs in "t" minutes is

- b** In a car park, an amount of 10 pounds is collected for parking the car for first hour, and 5 pounds are added for each hour of waiting after the first hour.

The amount collected for parking the car for “h” hours after the first hour is

- c** Hala receives a daily wage of “p” pounds. If her expenses in 10 days amounted of 325 pounds.

The amount remaining with her in 10 days is

- 19** Find the value of the variable in each of the following equations:

a $4a - 15 \div 3$ [If $a = 6$]

=

=

b $y - 6 = 11$

=

=

c $3b = 45$

=

=

d $a \div 6 = 3$

=

=

- 20** Diaa saves 150 pounds every month from expenses, so if the amount that he saves in (x) month is (y) pounds, then:

a The equation that represents this situation is

b The independent variable is

c The dependent variable is

d What Diaa saves in a year is

- 21** If Hazem owns a discount card of 50 pounds. Complete:

a The equation represents the relationship between Hazem’s purchases amounted (x) pounds, and the amount to be paid after the discount (y) pounds is

b The independent variable is

c The dependent variable is

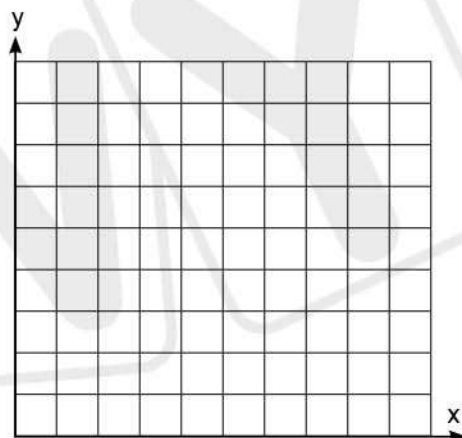
d The required amount if the purchase price before the discount is 420 pounds is

Final Revision

- 22 Omar manufactures hats, producing 10 hats per day. Complete the following table representing the number of working days (x) and the number of hats produced (y). Write an equation that shows the relationship between the variables x and y and then represent it graphically.

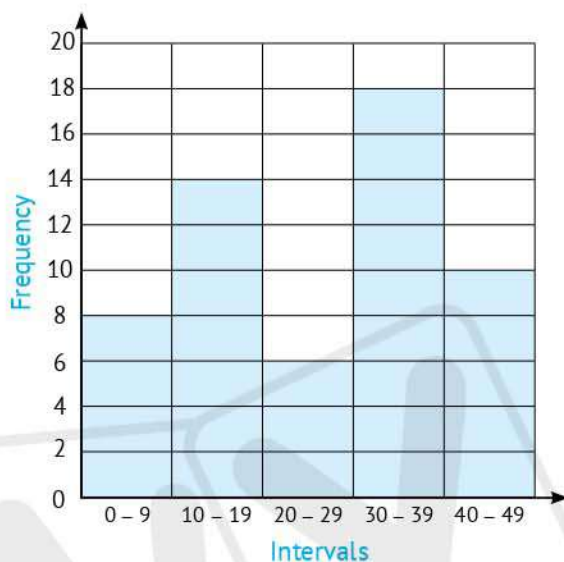
x	2	4	7	9
y	.....	.....	.....	.....

The equation:



- 23 Using the following histogram, complete the following interval table:

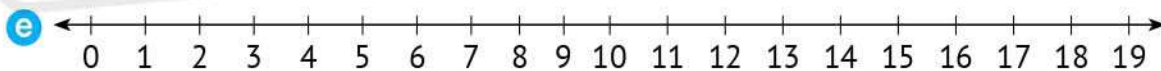
Intervals	Frequency
0 – 9
10 – 19
20 – 29
30 – 39
40 – 49



- 24 The box plot for each of the following groups of values:

3 , 8 , 7 , 2 , 10 , 12 , 9 , 2 , 10 , 9

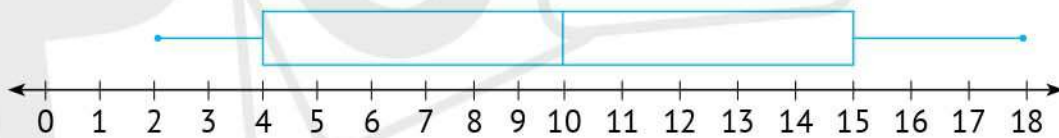
- a Arrangement:
- b Lower Quartile: c Median:
- d Upper Quartile:



- 25 If the heights of 5 pupils in the first preparatory grade in centimeters are: 132 , 131 , 126 , 128 , 133 .

Calculate the mean for these heights.

- 26 Find 5- points summary using the following box plots:



- a The Minimum Value: b The Lower Quartile:
 c The Median: d The Upper Quartile:
 e The Maximum Value:
- 27 The following table represents the temperatures recorded in a city in a week:

Day	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature	24°	20°	30°	21°	23°	22°	21°

Using the values shown in the previous table to find:

- a The Mean:
 b The Median:
 c The Mode:
 d The Range:
 e The Outliers:

Final Revision

28 Complete the following table using the dot plot graph for each of the following:

	Graph	Mean	Median	Mode	Outliers
a					
b					
c					
d					

29 Match each of the following with the appropriate graph(s):

a Representation of individual values

• Histogram 1

b Representation of hundreds of notes

• Dot plot 2

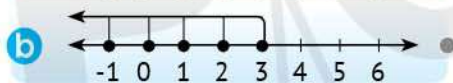
c Representation of data clusters and gaps in the data

• Box plot 3

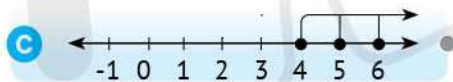
30 Match each number line to the inequality it represents:



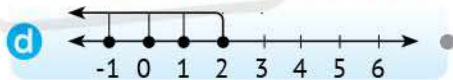
• $x < 3$ 1



• $x \geq 3$ 2



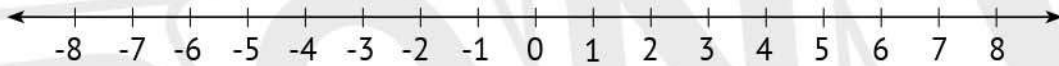
• $x > 3$ 3



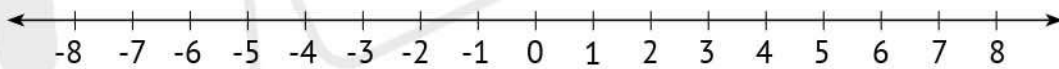
• $x \leq 3$ 4

31 Use the number line to represent each of the following inequalities:

a $x < 5$



b $x \geq -2$



Assessments on Units

Assessment on

Unit 1

First

- a 34 b 6 c 131
- d 1 e prime f 1
- g their product
- h $(6 \times 7) + (6 \times 5)$ i $2 \times (8 + 3)$
- j $4 \frac{1}{4}$

Second

- a 1044 b 351 c 2
- d 2 e 2 f 1
- g their product h $(8 \times 2) + (8 \times 7)$
- i $2 \frac{3}{10}$

Third

- 1 a 725 R2 b 108
c $8 \frac{5}{24}$ d $3 \frac{13}{20}$
- 2 $840 \div 15 = 56$ buildings
- 3 GCF = 8 , LCM = 48
- 4 a 8, 15 b none c 1
d 120 e yes
- 5 . GCF = 6
 . 3 red roses . 2 white roses
- 6 $25 - (9 \frac{1}{2} + 5 \frac{1}{4}) = 10 \frac{1}{4}$ pounds

Assessment on

Unit 2

First

- a -8 b 0 c 0
- d rational number e natural number
- f $\frac{2}{3}$ g $-\frac{3}{10}$ h -3.4
- i 3.7 j 0

Second

- a -7 b 0 c -11.5
- d 1 e same , opposite
- f -7 , -8 g integer , rational
- h -1.5 i 8 , -8 j 5.6

Third

- 1 a < b < c = d <
- 2 $|0.8|, 0.55, |-\frac{1}{2}|, -\frac{1}{4}, -\frac{3}{5}$

Accumulative Assessments 1 on Units 1-2

First

- a 6 b 72 c $2 \times 2 \times 5$
- d < e <

Second

- a $(6 \times 7) + (6 \times 5)$ b -2
- c -10 d -20 e 7, -7

Third

- a $2825 \div 25 = 113$ pounds
- b GCF = 9 , 9 plants

Accumulative Assessments 2 on Units 1-2

First

- a $-4 \frac{2}{3}$ b 35 c -7
- d > e -5

Second

- a 0 b -1.25 c $2 \times (8 + 6)$
- d 42 e $5 \frac{3}{10}$

Third

- 1 a $7\frac{19}{24}$ b $2\frac{3}{4}$
2 a 24, 90 b 6 c 360

Assessment on

Unit 3

First

- a 3 b 3 c 2
d $2y - 3$ e $25 - h$ f 5^3
g = h $15b$ i 2
j first choice

Second

- a $s - 10$ b 7 c $3n, 2n$
d $2(w - 5)$ e subtract 5 from 3 times x
f $6n$ g 80 h 3^6
i 0 j 1

Third

- 1 a $9n + 20$ b 12 c 20
2 not equivalent

Accumulative Assessments 2

on Units 1-3

First

- a 138 b 12 c 2
d $x - 9$ e 1

Second

- a 1989 b 3.2 c 30
d $7z$ e 4^2

Third

- a 5 b $0.8, \frac{1}{2}, |-0.25|, -\frac{1}{5}, -\frac{3}{4}$
c $\frac{t}{15}$ or $\frac{1}{15}t$

Accumulative Assessments 2

on Units 1-3

First

- a 36 b a c 3.7
d 2^3 e 2^4

Second

- a 2 b 1 c 2
d $8x$
e add 4 to 3 times b

Third

- 1 a 34 b 2
2 $3\frac{3}{4} - 2\frac{1}{5} = 1\frac{11}{20}$ kg

Assessment on

Unit 4

First

- a 4 b 4 c 8
d 3 e $x > 4$ f $x \leq -2$
g $x < 0$ h -7
i $x < 4$ j the second graph

Second

- a 2 b 5 c 4
d 6 e 12 f $3x = 15$
g $x < -6$ h $x \geq 3$ i $x > 0$
j 9 belongs to both

Third

- 1 a 9 b 6
2 a $x > 1$ or $x \geq -2$ b $x \leq -3$ or $x < -2$

Accumulative Assessments ①

on Units 1-4

First

- a 1 b -4 c -5
d 9 e 0

Second

- a 2 b 7 c $y - 3$
d 2 e $x \geq -8$

Third

- a $x + 2 = 9$, $x = 7$
b $3x = 12$, $x = 4$

Accumulative Assessments ②

on Units 1-4

First

- a their product b -8 c 2
d $x + 5$ e 8

Second

- a their product
b $8 \times (9 + 2) = (8 \times 9) + (8 \times 2)$
c 3 d 1 e $x < -6$

Third

- ① $(604 + 521) + 25 = 45$ students
② a 12 b 8

Assessment on

Unit 5

First

- a b b r
c exam result
d the number of days you go to the club
e $y = 6 - x$ f $y = 2(x + 5)$

- a subtract 8 then divide by 3

- b 8 c 18 d 32

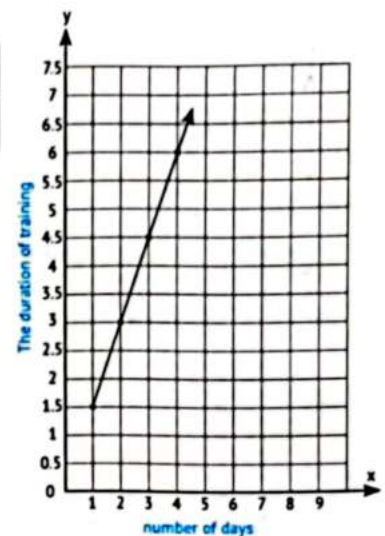
Second

- a a
b ① size of garage ② number of cars
c What Ahmed saves in all week, what Ahmed saves everyday
d ① $y = x + 2.4$, ② 6.4
e ① $y = x + 4$, ② 4
f ① add 15 then divide by 4 , ② 5

Third

x	1	2	3	4
y	1.5	3	4.5	6

- a The equation
 $y = 1.5x$



Accumulative Assessments ①

on Units 1-5

First

- a 1 b 0 c -3
d 4s e 3

Second

- a 8 b 21 c 10
d $x < 2$ e multiply by 5

Third

- ① a $y = 150x$ b x c y
d 1800 pounds
② $5950 \div 17 = 350$ cups

Accumulative Assessments 2 on Units 1-5

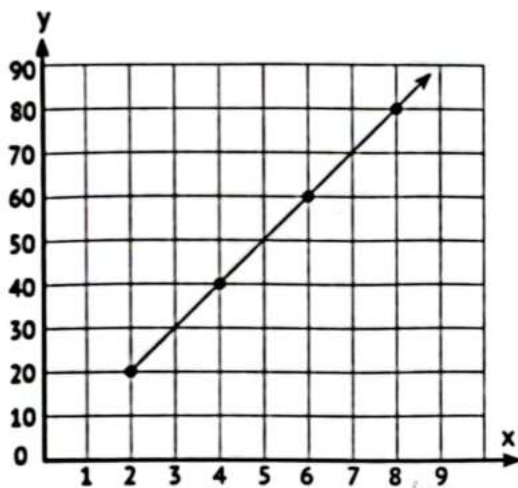
First

- a 15 b -1 c $(m + 18) + 3$
d $3 \times 3 \times 3 \times 3$ e 3

Second

- a 2, 3, 5, 7 b 9, 3, 6 c -2, -1, 0, 1
d same e 12

Third



- The equation is $y = 10x$

Assessment on Unit 6

First

- a It results in a lot of different answers
b favorite colors c ages d weight
e names f histogram g dot plot
h both bar graph and histogram
i 8 j 8

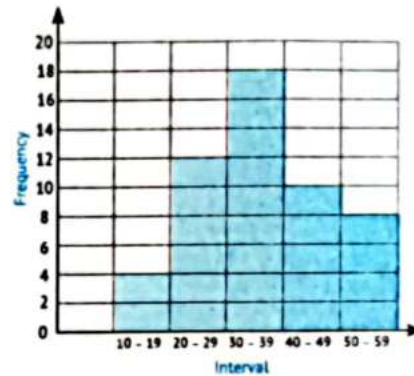
Second

- a statistical, non statistical
b numerical, categorical

- c numerical d numerical
e histogram f bar graph
g 7 h 1
i dot plot j histogram

Third

1



- 2 • order: 2, 2, 3, 7, 8, 9, 9, 10, 10, 12
• Min: 2 • Max: 12 • Median: 8.5
• Upper: 10 • Lower: 3, (Draw by your self)
- 3 a ① 3, dot plots ② 52, both
③ 2, dot plots ④ 1, dot plots
⑤ 9, dot plots
b Dot plots
① How many students weight 50 kg?
② How many students weight less than 40 kg?
- Box plots
① What is the upper quartile?
② What is the lower quartile?

Accumulative Assessments 1 on Units 1-6

First

- a 1 b 0 c rational
d 3 e $x \leq -7$

Second

- a 6, 4 b 65b c 7
d $x > 0$ e $x > 1$ or $x \geq 2$

Guide Answers

Third

- 1 a 2 b 10 c 6
 d 8 e 3
 2 a 34 b 29

Accumulative Assessments ② on Units 1-6

First

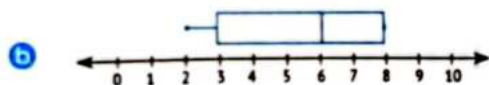
- a 11 b $-\frac{8}{4}$ c 2
 d $\frac{1}{2}(a-7)$ e $>$

Second

- a non statistical b 6 c 2
 d 1 e $3b, 2b$

Third

- a $3556 + 14 = 254$ minibuses



Assessment on

Unit 7

First

- a 63 b 6 c median
 d histogram e range f decrease
 g both of mean and median h 15
 i 3 j 7

Second

- a 5 b 3,5 c 14
 d 18 e mean, range

Third

- 1 a 24 b 24 c 24
 d 10 e 29

- 2 a 25 b 25 c 25
 d 8 e 30

Accumulative Assessments ① on Units 1-7

First

- a 1 b $4\frac{1}{4}$
 c $-2, -3$ d $2(x+7)$
 e Bar graph

Second

- a 11 b -5.9 c x
 d $x > -1$ e z, m

Third

- 1 a 21 b 10
 c 14 d 11
 2 a 10 b 2 c 6
 d 6 e 8

Accumulative Assessments ② on Units 1-7

First

- a $2 \times (8+3)$ b even number c 19
 d 6 e Favorite colors

Second

- a 2 b -15 c $5, -5$
 d 3 e words

Third

- 8, 14, 6, 18, 10

Final Revision

First

- 1 27
- 2 6
- 3 157
- 4 1
- 5 has only 2 factors
- 6 $2 \times 2 \times 3$
- 7 8
- 8 their product
- 9 their product
- 10 1
- 11 35
- 12 0
- 13 11
- 14 even
- 15 $2 \times 2 \times 5$
- 16 18
- 17 1
- 18 their product
- 19 their product
- 20 40
- 21 1
- 22 35
- 23 25
- 24 210
- 25 1
- 26 $(6 \times 7) + (6 \times 5)$
- 27 $4 \times (9 + 3)$
- 28 4
- 29 -4
- 30 -2
- 31 -15
- 32 12
- 33 0
- 34 -6
- 35 -1
- 36 0
- 37 <
- 38 >
- 39 -5
- 40 -1
- 41 -8
- 42 <
- 43 8
- 44 rational number
- 45 even number
- 46 natural
- 47 $\frac{3}{4}$
- 48 $-\frac{6}{1}$
- 49 >
- 50 $-\frac{8}{4}$
- 51 negative
- 52 rational
- 53 5
- 54 -2, -3
- 55 -8
- 56 3.7
- 57 0
- 58 2.7
- 59 farther from
- 60 2
- 61 -3
- 62 x
- 63 2
- 64 $5y, 2y$
- 65 none
- 66 9
- 67 $m - 10$
- 68 $60 - x$
- 69 $x - 5$
- 70 3
- 71 $x + 10$
- 72 $2x - 3$
- 73 $\frac{1}{2}(a - 7)$
- 74 $n + 7$
- 75 $x, +$
- 76 $4s$
- 77 15b
- 78 4×4
- 79 1
- 80 1
- 81 2^5
- 82 0
- 83 =
- 84 >
- 85 19
- 86 3^3
- 87 120 m
- 88 $5d + 20$
- 89 15
- 90 7
- 91 2
- 92 8
- 93 8
- 94 $x > -1$
- 95 $x < 5$
- 96 $x \leq -7$
- 97 3 doesn't belong to any of them

- 98 each includes all values to the left of 4
- 99 -9.5
- 100 6
- 101 $x < 0$
- 102 w
- 103 a
- 104 distance traveled
- 105 the number of correct answers
- 106 $y = 9 - x$
- 107 $y = 2x + 5$
- 108 divide by 3
- 109 subtract 3 then divide by 2
- 110 22
- 111 0
- 112 results in a lot of different answers
- 113 favorite colors
- 114 favorite TV shows
- 115 histogram
- 116 dot plots
- 117 bar graph
- 118 all
- 119 each value is represented by a point.
- 120 each bar represents a number or categorical
- 121 the bars must touch
- 122 bars are used to represent data
- 123 both of bar graph and histogram
- 124 all
- 125 histogram
- 126 bar graph
- 127 all
- 128 can display numerical and categorical
- 129 50
- 130 5
- 131 6
- 132 6
- 133 3
- 134 6
- 135 two modes
- 136 increases
- 137 Both
- 138 18
- 139 range
- 140 histogram
- 141 $-4\frac{2}{3}$
- 142 0.5
- 143 second one
- 144 $x < 2$
- 145 $x + 2 = 9$
- 146 6
- 147 9
- 148 3
- 149 5
- 150 53
- 151 none
- 152 mean
- 153 decrease
- 154 9
- 155 35
- 156 12

Second

- 1 48
- 2 9
- 3 1989
- 4 4886
- 5 2
- 6 2
- 7 2
- 8 3
- 9 11
- 10 2, 3, 5, 7
- 11 70
- 12 1
- 13 their product
- 14 prime
- 15 2
- 16 2
- 17 prime number

Guide Answers

- 18 2, 2, 7 19 1
 20 their product 21 5, 3, 5, 6
 22 7, 2, 4 23 9, 2, 8, 8 24 9, 4, 6
 25 the same distance \ different
 26 -10 27 -8 28 0
 29 1 30 1 31 0
 32 1 33 0 34 -1
 35 0 36 -2, -1, 0, 1 37 -1, -2, -3
 38 -1, 0, 1, 2 39 -1.5
 40 integer, rational 41 -7
 42 -7, 8 43 -5, -6
 44 natural integer, rational 45 rational
 46 $-\frac{5}{2}$ 47 -1.75 48 5
 49 $\frac{7}{9}$ 50 $\frac{3}{4}$ 51 0.03
 52 0.7 53 5, -5 54 7
 55 9 56 -4 57 18
 58 equal 59 x 60 3
 61 2 62 $6 \times, 2x$ 63 3.2
 64 3b 65 $z + 36$ 66 $x - 5$
 67 $m + 12$ 68 $12 - d$ 69 $7z$
 70 five times a increased by seven
 71 4s 72 45 73 81
 74 not equal 75 33 76 $s - 10$
 77 7 78 $3n, 2n$ 79 $2(w - 5)$
 80 80 81 base, exponent
 82 4^2 83 6^3 84 7^2
 85 4^5 86 6, 4 87 4
 88 4 89 3^6 90 0
 91 1 92 8 93 7×7
 94 8 95 $x + 1 = 8, 7$ 96 5
 97 11 98 2 99 9
 100 4 101 3 102 5
 103 3 104 $x < -6$
 105 6 belongs to both 106 $x > -1$
 107 $x < 2$ 108 $x > -9$ 109 r, e
 110 a
 111 number of box, the price of box
 112 m 113 x, y, 300
 114 add 4 115 6 116 3

117 3

118 greatest value - smallest value

119 dot plots or box plots

120 histogram

121 8

122 $15 - 3 = 12$ 123 17

124 27

125 Mean, range

126 10

127 18

Third

1 a 95

b 288

c 442 R5

d 49

e 629R17

f 632

2 a 35 bags

b 21 trays

c $2825 + 25 = 113$, $113 \times 36 = 4068$ pounds

d $45 \times 84 = 3780$, $3780 + 12 = 315$ books

e $32 \times 5 = 160$ pencils

$4 \times 16 = 64$ pencils

Total = $160 + 64 = 224$ pencils

Each friend = $224 + 8 = 28$ pencils

f each class = $1125 + 25 = 45$ students

3 a 12, 45

b 3

c 3

d 180

e no

4 a 10, 21

b none

c 1

d 210

e yes

5 10

6 greatest 8

2 oranges, 3 apples

7 14 groups

2 pens, 3 notes

8 GCF = 8, LCM = 48

9 a $6\frac{5}{6}$

b $10\frac{9}{20}$

c $1\frac{3}{20}$

d $3\frac{3}{4}$

10 $21\frac{1}{4}$

11 $18\frac{3}{4}$

12 $1\frac{11}{20}$

13 $4\frac{1}{10}$

14 a <

b <

c <

d >

e <

f <

g =

h <

i <

15 a Ascending: $-17, -9, |-3|, 8, |12|$

Descending: $|12|, 8, |-3|, -9, 17$

b Ascending: $-\frac{3}{4}, \frac{1}{4}, \frac{1}{2}, \frac{5}{8}, \frac{3}{4}$

Descending: $\frac{3}{4}, \frac{5}{8}, \frac{1}{2}, \frac{1}{4}, -\frac{3}{4}$

16 a 12 b 34 c 12

d 22 e 18 f 5

g 19 h 2 i 3

17 a 3 b 3

c 21 d 15

18 a $\frac{t}{15}$ b $5h + 10$ c $10p - 325$

19 a 19 b 17

c 15 d 18

20 a $y = 150x$ b x

c y d 1800

21 a $y = x - 50$ b x

c y d 370

22 20, 40, 70, 90, $y = 10x$

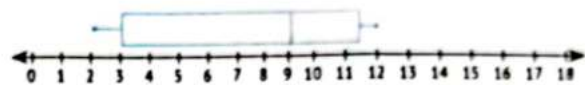
23 8, 14, 6, 18, 10

24 a 2, 2, 3, 7, 8, 9, 9, 10, 10, 12

b 3 c 8.5

d 10

e



25 130

26 a 2 b 4 c 10

d 15 e 18

27 a 23 b 22 c 21

d 10 e 30

28 a 8, 9, (9, 10), 1

b 14, 14, 11, 19

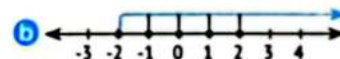
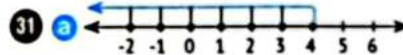
c 9, 8.5, 7, 14

d 27, 27.5, 30, (20, 21)

29 a 2 b 3 c 1

30 a 2 b 4

c 3 d 1





First term Questions Bank



Question 01

Choose the correct answer

- 1 Take away double the number m from 20 is written as
 - a $20 - m$
 - b $m - 20$
 - c $2m - 20$
 - d $20 - 2m$
- 2 The volume of the cube of edge length 4 cm is cm^3
 - a 12×4
 - b $4 + 4 + 4$
 - c 4^3
 - d 3^4
- 3 $3 \times 3 \times 3 \times 3 \times 3 = \dots\dots\dots$
 - a 3×5
 - b $3 + 3 + 3 + 3 + 3$
 - c 3^5
 - d 5^3
- 4 $3 + 3 + 3 + 3 + 3 = \dots\dots\dots$
 - a 3×5
 - b $3 \times 3 \times 3 \times 3 \times 3$
 - c 3^5
 - d 5^3
- 5 The value of the expression $5m \div 3$ for $m = 6$ is
 - a 3
 - b 5
 - c 6
 - d 10
- 6 The first operation you perform in the expression $6 + (5^3 - 4) \div 2$ is
 - a add
 - b Subtract
 - c exponent
 - d Divide
- 7 The first operation you perform in the expression $6 + 5^3 - (4 \div 2)$ is
 - a add
 - b Subtract
 - c exponent
 - d Divide
- 9 Seven cubed added to six squared equals
 - a $7 \times 3 + 6 \times 2$
 - b $6^2 + 7^3$
 - c $6^2 - 7^3$
 - d $2^6 + 3^7$
- 10 Rozana saved x pounds . Mr Mahmoud Elkholy gave her 20 pounds , then she havepounds now .
 - a $x - 20$
 - b 45
 - c $x + 20$
 - d $20x$
- 11 If $x + 5 = 8$, then $3x = \dots\dots\dots$
 - a 3
 - b 5
 - c 9
 - d 15
- 12 A number if added to 5 the result is 17 , then the number is
 - a 12
 - b 22
 - c 5
 - d 17
- 13is a solution of the inequality $d > 15$
 - a 15
 - b 12
 - c 20
 - d All of them



- 14is a solution of the inequality $d \geq 15$
 (a) 15 (b) 16 (c) 20 (d) All of them
- 15 The mode of 7, 9, 7, 8, 7, 6, 7 and 10 is.....
 (a) 7 (b) 8 (c) 9 (d) 10
- 16 All the dot plots have the following characteristics except
 (a) dot plot should have titles (b) dot plots should have data graphed above a number line
 (c) the number lines in dot plots should start at 0 (d) each individual piece of data can be seen on a dot plot and is represented by a dot.
- 17 A has two axes, horizontal and vertical.
 (a) bar graph (b) histogram (c) double bar graph (d) all of them
- 18 The question : what are the students favourite colours? Is a..... question
 (a) statistical (b) non-statistical (c) numerical data (d) All of them
- 19 The range = the greatest value..... the smallest values.
 (a) + (b) - (c) \div (d) \times
- 20 The best subset for the number 5 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 21 The best subset for the number 5.2 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 22 The Set of counting numbers The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 23 The Set of integers The set of natural numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 24 -5 The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 25 r is 9 times p added to twice m in the equation is.....
 (a) $r = 9p + m$ (b) $r = 2m + 9p$ (c) $9r = p + 2m$ (d) $r + m = 9p$



- 26** In the equation : $y = x + 1$, if the output is 1, then the input is....
 (a) 1 (b) 3 (c) 2 (d) 0
- 27** The order pair which satisfies the rule : $y = 3x + 1$ is....
 (a) (0, 0) (b) (0, 4) (c) (-1, 1) (d) (1, 4)
- 28** which of the following data set hasn't any outlier?
 (a) 103, 104, 105, 103, 102, 17 (b) 24, 25, 26, 21, 22, 23, 204
 (c) 300, 309, 302, 303, 305, 306, 308 (d) 4, 211, 212, 213, 214, 215, 1000
- 29** Youssef eat at least 3 oranges , then Youssef may eatoranges
 (a) 3 (b) 5 (c) 12 (d) All of them
- 30** Layan has 25 pounds and Maya has more money than Layan , then Maya may haspounds .
 (a) 25 (b) 20 (c) 100 (d) All of them
- 31** Zyad has 16 candies and Kareem has less candies than Zyad , then Kareem may hascandies .
 (a) 100 (b) 16 (c) 10 (d) All of them
- 32** Jana bought 6 SPIRO SPATHIS and Mohamed bought same number or more ,then Mohamed may bought SPIRO SPATHIS .
 (a) 6 (b) 12 (c) 100 (d) All of them
- 33** All of the following are solutions of inequality $x \leq -8$ except
 (a) -8 (b) -10 (c) -7 (d) All of them
- 34** In the equation : $5x + 2 = y$, the independent variable is
 (a) 5 (b) 2 (c) x (d) y
- 35** In the equation : $b = \frac{1}{2}f + 3$, the dependent variable is
 (a) 5 (b) 2 (c) f (d) b
- 36** The GCF of any two different prime numbers is
 (a) 0 (b) 1 (c) itself (d) The smallest number
- 37** $\frac{3}{6} + \frac{1}{2} = \dots\dots\dots$
 (a) $\frac{1}{2}$ (b) $\frac{3}{6}$ (c) 1 (d) $\frac{4}{8}$
- 38** Which of the following is an equation ?
 (a) $3n + 7$ (b) 7 times the number h (c) $3c = 3$ (d) $6e - 7$



- 39 [2 , m] satisfies the rule $y = 3x - 2$, then $m =$
 (a) 1 (b) 2 (c) 3 (d) 4
- 40 In the equation : $y = 2x + 10$, the ordered pair (3 , n) satisfies the equation , then $n =$
 (a) 2 (b) 10 (c) 16 (d) 30
- 41 " Y is 6 times h added to 12 " in equation is
 (a) $12 = y + 6h$ (b) $Y = 12 h + 6$ (c) $H = 6y + 12$ (d) $Y = 6 h + 12$
- 42 (..... ,) is called the origin .
 (a) (1 , 1) (b) (0 , 1) (c) (0 , 0) (d) (1 , 0)
- 43 The greatest negative integer is
 (a) 1 (b) -1 (c) 0 (d) -1000,000
- 44 $\frac{3}{7} + \frac{2}{5} =$
 (a) $\frac{5}{12}$ (b) $\frac{29}{35}$ (c) $\frac{1}{2}$ (d) 1
- 47 $3(5 + 4) = (3 \times \dots) + (\dots \times 4)$
 (a) 5,3 (b) 5,4 (c) 3,5 (d) 3,4
- 48 In the equation the : $y = 2x + 3$, the ordered pair (2, a) satisfies the equation then, $a =$
 (a) 5 (b) 8 (c) 7 (d) 9
- 49 The median of the value 4, 7, 8, 1 and 3 is
 (a) 3 (b) 1 (c) 4 (d) 7
- 50 The median of $B + 1$, $B + 2$, $B + 3$ is 10, then $B =$
 (a) 1 (b) 3 (c) 2 (d) 8
- 51 If the upper quartile of the values : $m + 1$, $m + 2$, $m + 3$, $m + 4$, $k + 5$, where m is a positive integer is 16.5, then $m =$
 (a) 7 (b) 8 (c) 12 (d) 10
- 52 All the following are numerical data except.....
 (a) names (b) ages (c) length (d) temperatures
- 53 The opposite of the number 15 is
 (a) 15 (b) | 15 | (c) -15 (d) | -15 |
- 54 The additive inverse of | - 4 | is
 (a) 4 (b) | 4 | (c) -4 (d) | -4 |



- 55 In the equation : $x = 5y + 3$, the dependent variable is.....
 (a) $5y$ (b) x (c) y (d) 3
- 56 In the equation : $4a + 24 = b$, the independent variable is.....
 (a) a (b) b (c) 24 (d) $4a$
- 57 "k equals the product of m and 4" in equation is.....
 (a) $k = 4m$ (b) $k = 4 + m$ (c) $m = 4k$ (d) $m = k + 4$
- 58 which of the following is an equation?
 (a) $20x + 53.2$ (b) $2 + m$ (c) $Y > 12$ (d) $5x = 20$
- 59 "30 less than f equals y" in the equation is.....
 (a) $30 - f = y$ (b) $30 + f = y$ (c) $F - 30 = y$ (d) $Y - 30 = f$
- 60 If $(4, \dots)$ satisfies the rule $y = \frac{1}{2}x + 2$
 (a) 4 (b) 10 (c) 6 (d) 2
- 61 $\frac{9}{2}$ The set of natural numbers
 (a) Belong (b) Does not belong (c) subset (d) Not subset
- 62 is categorical data.
 (a) age (b) phone number (c) weight (d) favourite TV show
- 63 is numerical data
 (a) nationality (b) Place of birth (c) Exam degree (d) name
- 64 The LCM of any two different prime numbers is
 (a) 1 (b) The product of them (c) The smallest number (d) The greatest number
- 65 The dividend in $321 \div 12 = 26 \text{ R}9$ is
 (a) 321 (b) 12 (c) 26 (d) 9
- 66 is the better measure of centre for data set with outlier values.
 (a) Median (b) Range (c) Mode (d) mean
- 67 Which of the following is nearest to zero ?
 (a) 5 (b) -1 (c) -3 (d) 3
- 68 The best subset for the number 0 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers



- 69 Which of the following is the greatest number ?
 (a) -5.3 (b) -3.5 (c) 3.5 (d) 5.3
- 70 Which of the following is the smallest number ?
 (a) -3.2 (b) -2.3 (c) -0.5 (d) -0.01
- 71 The best subset for the number -3 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 72 The range can not be found using.....
 (a) dot plot (b) histogram (c) box plot (d) all of them
- 73 If the mean of 8, 6, x, 5 is 5, then x =
 (a) 1 (b) 2 (c) 3 (d) 4
- 74 The mean of the values "54, 32, 30, 4" is.....
 (a) 18 (b) 30 (c) 4 (d) 54
- 75 The LCM of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 76 The GCF of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 77 The common factor of all number is
 (a) 0 (b) 1 (c) 2 (d) 100
- 78 If the cost of one ticket "h" and the total cost of 5 tickets "m", Then the independent variable is.....
 (a) m (b) h (c) 5 (d) 5h
- 79 If the cost of one ticket "h", then total cost of 5 tickets is
 (a) m (b) h (c) 5 (d) 5h
- 80 The order pair which satisfies the equation : $y = x + 2$
 (a) (0, 2) (b) (1, 1) (c) (2, 1) (d) (1, 2)
- 81 Which of the following is numerical expression ?
 (a) $3(6d + 5)$ (b) $8 + 6$ (c) $2n - 9$ (d) $4 - h$
- 82 Which of the following is algebraic expression ?
 (a) $4(6 + 5)$ (b) $4 - 1 + 2$ (c) $20 \div 9$ (d) $3h$
- 83 The integer which comes just after -1 is
 (a) 0 (b) 1 (c) -2 (d) -1



- 84 The integer that is one less than 0 is
 (a) 0 (b) 1 (c) -2 (d) -1
- 85 All counting numbers are also
 (a) natural numbers (b) Rational numbers (c) Integers (d) All of them
- 86 $|-10| > \dots\dots\dots$
 (a) $|-9.99|$ (b) $|-90|$ (c) $|-100|$ (d) $|-15|$
- 87 $5(8 + \dots\dots) \times 7$ is a numerical expression .
 (a) d (b) $4f$ (c) 5 (d) $19 + n$
- 88 $5(8 + \dots\dots) \times 7$ is a algebraic expression .
 (a) 5 (b) $5m$ (c) $18 + 2$ (d) 13
- 89 Adding 5 to third a number =
 (a) $5 + 3x$ (b) $3x + 5$ (c) $\frac{1}{3}x - 5$ (d) $\frac{1}{3}x + 5$
- 90 The distance between -6 and its opposite on the number line is
 (a) 6 (b) -6 (c) 12 (d) -12
- 91 $|-15| = m$, then $m = \dots\dots\dots$
 (a) -15 (b) 15 (c) Both a,b (d) neither
- 92 $|-x| = 5$, then $x = \dots\dots\dots$
 (a) -5 (b) 5 (c) Both a,b (d) neither
- 93 The number of terms in the expression $6d + 2 - 5n \div 4$ is terms
 (a) 1 (b) 2 (c) 3 (d) 4
- 94 The like terms in the expression $2f + 2 - 2k - 8$ is
 (a) $2f, 2k$ (b) 2, 8 (c) 2, $2k$ (d) $2f, 2$
- 95 The constant in the expression $6d + 2 - 5n$ is
 (a) 6 (b) d (c) $5n$ (d) 2
- 96 The coefficient in the expression $6d + 2$ is
 (a) 6 (b) d (c) $6d$ (d) 2
- 97 The balance (mean) of the following date set 1, 2, 3, 4, 4, 6, 8 is.....
 (a) 2 (b) 6 (c) 4 (d) 8
- 98is another name for the mean .
 (a) Median (b) Range (c) Mode (d) Average



Question 02

Complete

- 1 6 cubed =
- 2 5 squared =
- 3 $5^2 + 6 - 2^3 =$
- 4 If the number of chicken owned is "t" and the number of eggs collected daily is "h", then the independent variable is
- 5 The lower quartile for the set of data : 5, 7, 9, 10, 12, 15, 20 is.....
- 6 The graph shows gaps and cluster is
- 7 The graph shows distribution and spread is
- 8 The upper quartile of the values "7, 1, 6, 2, 3, 1, 9" is.....
- 9 The median of the values "2, 7, 10, 0, 2, 5, 6, 6, 12, 1" is.....
- 10 If the upper quartile of the values : $x + 14, x + 10, x + 12, x + 15, x + 16, x + 11, x + 14, x + 17$ where x is a positive integer is 18.5, then x =
- 11 $5x = 20$, then $\frac{1}{2}x =$
- 12 $100x = 0$, then $12x =$
- 13 $100x = 100$, then $12x =$
- 14 $\frac{x}{5} = 6$, then x =
- 15 $3n = 15$, then n =
- 16 $X + 5.4 = 7.8$, then x =
- 17 $7x = 28$, then $\frac{1}{2}x =$
- 18 "F equals the product of m and 6" as an equation is
- 19 The inequality that represent the negative integers is
- 20 we use.....to see exactly how many times each individual values occurs.
- 21 The inequality that represent the positive integers is
- 22 The smallest natural number is
- 23 The inequality that represent the non-negative integers is
- 24 The inequality that represent the non-positive integers is



- 25 The graph shows the 5-number summary is
- 26 The graph shows the set of data in form of intervals is
- 27 "Twice x added to 7 equals y" as an algebraic equation is
- 28 " $m = 5d - 5$ " as a verbal is
- 29 In the equation : $d = \frac{5}{9}n - 8$ the dependent variable is
- 30 The verbal phrase for $k + 10 = 12$ is
- 31 "20 more than v equals m" in equation is
- 32 The rule is "multiply by 8". if $x = \frac{1}{4}$, then y would be
- 33 4 more than s equals t in equation is
- 34 The word phrase for the equation " $h = 8g$ " is
- 35 The ordered pair which satisfies the rule: $y = x + 5$ is (1,)
- 36 In the rule : $y = 4x$, if $x = 1.5$ then $y = \dots \dots \dots$
- 37 The verbal phrase for : $2m + 4 = 8$ is
- 38 $5 - 3\frac{2}{5} = \dots \dots \dots$
- 39 "z equals the sum of adding 12 to the product of 4 and y" the equation is
- 40 The dependent variable in the equation $a = 4b + \frac{1}{2}$ is.....
- 41= maximum value – minimum value
- 42 The maximum values for the set of values "4,7,9,1,6" is.....
- 43 The favourite colours of a number of pupils are..... data.
- 44 If the mean of 5 values is 15, then the sum of these values is.....
- 45 If the marks of 6 pupils in one of the tests are 29, 33,57,40,36 and 49, then the range for these marks is equal to.....
- 46 The number of integers between -5 and -1 are
- 47 The smallest counting number is
- 48 The value of the expression $2x^2 - (2 \times 3 + 3^2)$ for $x = 3$ is
- 49 If the price of one pen is 6 pounds , then the price of x pens is
- 50 If the price of 10 pens is x pounds , then the price of one pen is
- 51 In 5^4 the base isand the exponent is



- 52 The base is 8 and the exponent is 3 , then the exponential form of this is
- 53 In a square the side length is x then the perimeter is and the area is
- 54 are the values that lie away the other values.
- 55is the middle values of the data set.
- 56 The additive inverse of -6 is
- 57 The additive inverse of 0 is
- 58 The LCM of 5 and 7 is
- 59is the value that occurs most often .
If 50 is the greatest number of data set and the range = 10 ,then
- 60 The smallest number of this data set equals.....
- 61 The number -2.5 in the form $\frac{a}{b}$ is
- 62 The opposite of the number 50 is
- 63 The integer which comes just before -9 is
- 64 The GCF of 5 and 7 is
- 65 The outlier of the following date set 91, 94, 93, 3, 90, 99 is.....
- 66 The mode of the following set "3,4, 5,3,5,7,5,9,5,3" is.....
- 67 The range of the set of values 6, 5, 9,4,11,3, 7 is.....
- 68 If the range of a set of values is 12 and the smallest value is 8, then the largest values is.....
- 69 If the sum of a group of values is 18 and the mean of these values is 3, then the number of these values is.....
- 70 The smallest positive integer is
- 71 The smallest non-negative integer is
- 72 The greatest non-positive integer is
- 73 type of data is or
- 74 What is your favourite school subject? is..... question.
- 75 The GCF of 8 and 9 is
- 76 The LCM of 8 and 9 is
- 77 $864 \div 24 =$

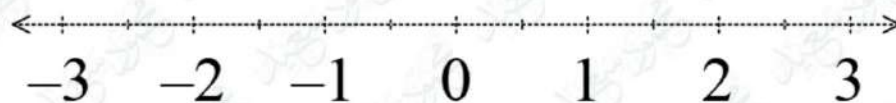


- 78is a multiple of all numbers .
- 79is a factor of all numbers .
- 80 The number of terms in the expression $6h + 2d - 3x$ isterms
- 81 The constant in the expression $5f + 2b + 3$ is
- 82 $|-5| + 3 = \dots\dots\dots$
- 83 The graph shows spread of the data in each quarter is.....
- 84 data is written in the form of numbers.
- 85 The types of pens preferred by your class's students is adate.
- 86 The median of the following date set "4, 5,7,7,8,9,9" is.....
- 87 $|-18| \times 0 = \dots\dots\dots$
- 88 The algebraic expression of a number less than 5 is
- 89 The algebraic expression of a number less 5 is
- 90 The coefficient in the expression $-5d + 3$ is
- 91 The product of 5 and a number t is
- 92 Twice the difference between a number and 6 is

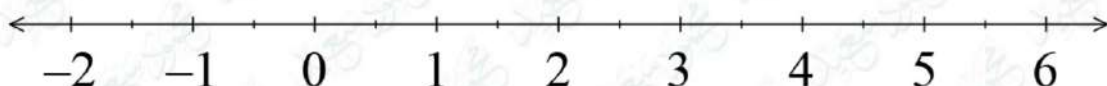
Question 03

Answer the following questions

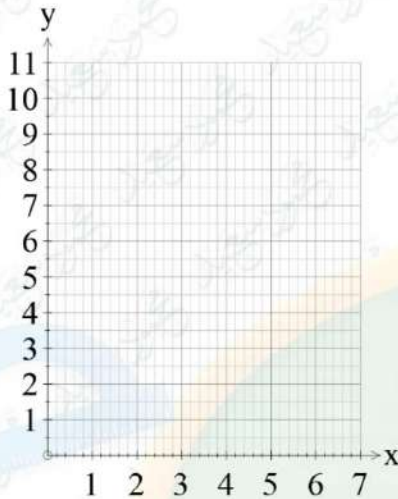
- 1** Simplify the following :
- 1) $6^2 + 2(24 - 9) \div 3$
- 2) $8 - 4 \times 6 \div [5 - 3]^3$
-
- 2** Mohamed has x pounds . he bought a book for 60 pounds . write the algebraic expression of how much money with him now .
-
- 3** Represent $-2\frac{2}{5}$ on the number line .



- 4 Represent $5 \geq x$ on the number line in the set of integers.



- 5 Write an equation. Use the variables x and y , where x is the independent variable .
Write the equation " add 1 and multiply by 2 " and substitute x by 1,2,3 and 4 to evaluate y .
then complete the table ,then represent the table on a graph .



Equation is :

X	1	2	3	4
y

- 6 Write a verbal phrase for each of the following :

a) $f + 10 = m$

b) $b = 5 - k$

c) $2n + 8 = a$

.....
.....

- 7 Complete the following table according to the equation : $y = 3x - 1$

X	1	3	5	7
y

- 8 Masa needed to earn at least 100 pounds daily to buy a mobile . find four possible amounts that Masa needed to earn ,then write the inequality that represented this situation .

.....

- 9 Joudy paid 3,888 pounds to buy 24 candies . find the price of each box .

.....

- 10 Find three rational numbers between 3.5 and 3.6

.....

- 11 Write an equation, use the variables x and y , where x is the independent and using the rule " multiply by 8 ", then substitute $x = \frac{1}{2}$ to evaluate y .

.....



12 Write each the verbal phrase as an algebraic equation :

(a) m equals twice n increased by 20

(b) y equals the product of eight and x added to 48

13 When $m = 3$. solve $9 + (m^2 - 3) \div 2$

14 Rodina has 30 pounds , she will save 10 pounds daily . write the algebraic expression , then evaluate how much money will she have after 1 week ?

15 Write a verbal phrase for each of the following equation :

a) $y = 3x + 1$

b) $y + 5 = x$

c) $g = (h \div 3) + 12$

16 Write an equation, use the variables x and y where x is the independent variable ,then evaluate y

a) The equation " multiply by 6", substitute if $x = 7$

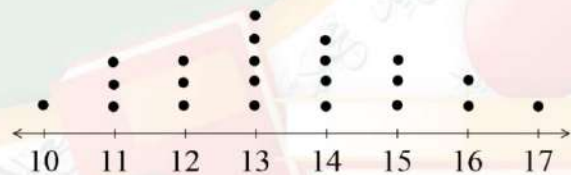
b) The equation " multiply by 2 and add 3", substitute if $x = 2$

17 By using the opposite dot plot find :

(a) The median

(b) The mode

(c) The range



18 If the number of goals registered by Al Zamalek in 6 matches are 3, 2, 6, 6, 1, 6

Calculated the mean , median and mode of the number of goals.

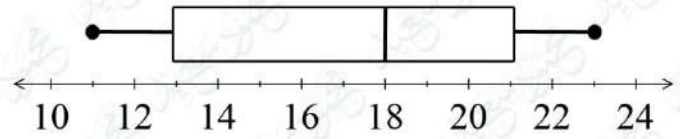
19 Rahma runs 3 km on Saturday, 5 km Sunday, 4 km Monday 4 km Tuesday and 4 km Friday

Find the mean distance covered by Rahma .



20 from the opposite box plot, complete

- (a) The maximum value =
 (b) The minimum value =
 (c) the median =
 (d) the lower quarter =
 (e) the upper quarter =



21 Solve each of the following equations :

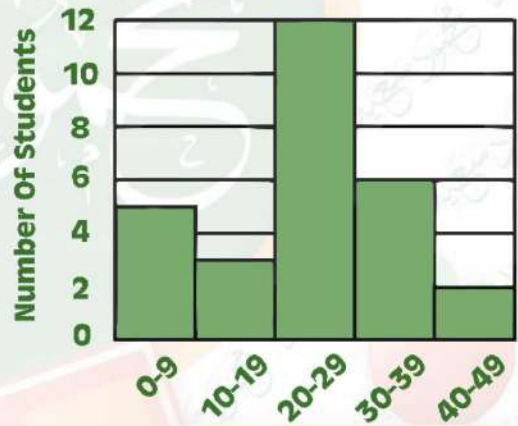
- (a) $\frac{x}{4} = 3$
 (b) $12x - 5 = 7$

22 from the histogram shown at the right answer the following questions .

1. Which interval represents the most number of students?
 2. Which interval has three students?
 3. How many students went to a pool at least 30 times last summer?

4. How many students went to a pool less than ten times last summer?

Number of visits to a pool
Last summer



Number Of visits

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم





First term Questions Bank



Question 01

Choose the correct answer

- 1 Take away double the number m from 20 is written as
 (a) $20 - m$ (b) $m - 20$ (c) $2m - 20$ (d) $20 - 2m$
- 2 The volume of the cube of edge length 4 cm is cm^3
 (a) 12×4 (b) $4 + 4 + 4$ (c) 4^3 (d) 3^4
- 3 $3 \times 3 \times 3 \times 3 \times 3 =$
 (a) 3×5 (b) $3 + 3 + 3 + 3 + 3$ (c) 3^5 (d) 5^3
- 4 $3 + 3 + 3 + 3 + 3 =$
 (a) 3×5 (b) $3 \times 3 \times 3 \times 3 \times 3$ (c) 3^5 (d) 5^3
- 5 The value of the expression $5m \div 3$ for $m = 6$ is
 (a) 3 (b) 5 (c) 6 (d) 10
- 6 The first operation you perform in the expression $6 + (5^3 - 4) \div 2$ is
 (a) add (b) Subtract (c) exponent (d) Divide
- 7 The first operation you perform in the expression $6 + 5^3 - (4 \div 2)$ is
 (a) add (b) Subtract (c) exponent (d) Divide
- 9 Seven cubed added to six squared equals
 (a) $7 \times 3 + 6 \times 2$ (b) $6^2 + 7^3$ (c) $6^2 - 7^3$ (d) $2^6 + 3^7$
- 10 Rozana saved x pounds. Mr Mahmoud Elkholy gave her 20 pounds, then she havepounds now .
 (a) $X - 20$ (b) 45 (c) $X + 20$ (d) $20 \times$
- 11 If $x + 5 = 8$, then $3x =$
 (a) 3 (b) 5 (c) 9 (d) 15
- 12 A number if added to 5 the result is 17, then the number is
 (a) 12 (b) 22 (c) 5 (d) 17
- 13is a solution of the inequality $d > 15$
 (a) 15 (b) 12 (c) 20 (d) All of them



- 14 is a solution of the inequality $d \geq 15$
 (a) 15 (b) 16 (c) 20 (d) All of them
- 15 The mode of 7, 9, 7, 8, 7, 6, 7 and 10 is.....
 (a) 7 (b) 8 (c) 9 (d) 10
- 16 All the dot plots have the following characteristics except
 (a) dot plot should have titles (b) dot plots should have data graphed above a number line
 (c) the number lines in dot plots should start at 0 (d) each individual piece of data can be seen on a dot plot and is represented by a dot.
- 17 A has two axes, horizontal and vertical.
 (a) bar graph (b) histogram (c) double bar graph (d) all of them
- 18 The question : what are the students favourite colours? Is a..... question
 (a) statistical (b) non-statistical (c) numerical data (d) All of them
- 19 The range = the greatest value..... the smallest values.
 (a) + (b) - (c) \div (d) \times
- 20 The best subset for the number 5 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 21 The best subset for the number 5.2 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 22 The Set of counting numbers The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 23 The Set of integers The set of natural numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 24 -5 The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 25 r is 9 times p added to twice m in the equation is.....
 (a) $r = 9p + m$ (b) $r = 2m + 9p$ (c) $9r = p + 2m$ (d) $r + m = 9p$



- 26 In the equation : $y = x + 1$, if the output is 1, then the input is....
 (a) 1 (b) 3 (c) 2 (d) 0
- 27 The order pair which satisfies the rule : $y = 3x + 1$ is....
 (a) (0, 0) (b) (0, 4) (c) (-1, 1) (d) (1, 4)
- 28 which of the following data set hasn't any outlier?
 (a) 103,104,105,103,102,17 (b) 24,25,26,21,22,23,204
 (c) 300, 309, 302, 303, 305, 306, 308 (d) 4,211,212,213,214,215,1000
- 29 Youssef eat at least 3 oranges , then Youssef may eatoranges
 (a) 3 (b) 5 (c) 12 (d) All of them
- 30 Layan has 25 pounds and Maya has more money than Layan , then Maya may haspounds .
 (a) 25 (b) 20 (c) 100 (d) All of them
- 31 Ziad has 16 candies and Kareem has less candies than Ziad , then Kareem may hascandies .
 (a) 100 (b) 16 (c) 10 (d) All of them
- 32 Jana bought 6 SPIRO SPATHIS and Mohamed bought same number or more ,then Mohamed may bought SPIRO SPATHIS .
 (a) 6 (b) 12 (c) 100 (d) All of them
- 33 All of the following are solutions of inequality $x \leq -8$ except
 (a) -8 (b) -10 (c) -7 (d) All of them
- 34 In the equation : $5x + 2 = y$, the independent variable is
 (a) 5 (b) 2 (c) x (d) y
- 35 In the equation : $b = \frac{1}{2}f + 3$, the dependent variable is
 (a) 5 (b) 2 (c) f (d) b
- 36 The GCF of any two different prime numbers is
 (a) 0 (b) 1 (c) itself (d) The smallest number
- 37 $\frac{3}{6} + \frac{1}{2} = \dots\dots\dots$
 (a) $\frac{1}{2}$ (b) $\frac{3}{6}$ (c) 1 (d) $\frac{4}{8}$
- 38 Which of the following is an equation ?
 (a) $3n + 7$ (b) 7 times the number h (c) $3c = 3$ (d) $6e - 7$



- 39 [2 , m] satisfies the rule $y = 3x - 2$, then $m =$
 (a) 1 (b) 2 (c) 3 (d) 4
- 40 In the equation : $y = 2x + 10$, the ordered pair (3 , n) satisfies the equation , then $n =$
 (a) 2 (b) 10 (c) 16 (d) 30
- 41 " Y is 6 times h added to 12 " in equation is
 (a) $12 = y + 6h$ (b) $Y = 12 h + 6$ (c) $H = 6y + 12$ (d) $Y = 6 h + 12$
- 42 (..... ,) is called the origin .
 (a) (1 , 1) (b) (0 , 1) (c) (0 , 0) (d) (1 , 0)
- 43 The greatest negative integer is
 (a) 1 (b) -1 (c) 0 (d) -1000,000
- 44 $\frac{3}{7} + \frac{2}{5} =$
 (a) $\frac{5}{12}$ (b) $\frac{29}{35}$ (c) $\frac{1}{2}$ (d) 1
- 47 $3(5 + 4) = (3 \times \dots) + (\dots \times 4)$
 (a) 5,3 (b) 5,4 (c) 3,5 (d) 3,4
- 48 In the equation the : $y = 2x + 3$, the ordered pair (2, a) satisfies the equation then, $a =$
 (a) 5 (b) 8 (c) 7 (d) 9
- 49 The median of the value 4, 7, 8, 1 and 3 is
 (a) 3 (b) 1 (c) 4 (d) 7
- 50 The median of $B + 1$, $B + 2$, $B + 3$ is 10, then $B =$
 (a) 1 (b) 3 (c) 2 (d) 8
- 51 If the upper quartile of the values : $m + 1$, $m + 2$, $m + 3$, $m + 4$, $k + 5$, where m is a positive integer is 16.5, then $m =$
 (a) 7 (b) 8 (c) 12 (d) 10
- 52 All the following are numerical data except.....
 (a) names (b) ages (c) length (d) temperatures
- 53 The opposite of the number 15 is
 (a) 15 (b) | 15 | (c) -15 (d) | -15 |
- 54 The additive inverse of | - 4 | is
 (a) 4 (b) | 4 | (c) -4 (d) | -4 |



- 55 In the equation : $x = 5y + 3$, the dependent variable is.....
 (a) $5y$ (b) x (c) y (d) 3
- 56 In the equation : $4a + 24 = b$, the independent variable is.....
 (a) a (b) b (c) 24 (d) $4a$
- 57 "k equals the product of m and 4" in equation is.....
 (a) $k = 4m$ (b) $k = 4 + m$ (c) $m = 4k$ (d) $m = k + 4$
- 58 which of the following is an equation?
 (a) $20x + 53.2$ (b) $2 + m$ (c) $Y > 12$ (d) $5x = 20$
- 59 "30 less than f equals y" in the equation is.....
 (a) $30 - f = y$ (b) $30 + f = y$ (c) $F - 30 = y$ (d) $Y - 30 = f$
- 60 If $(4, \dots)$ satisfies the rule $y = \frac{1}{2}x + 2$
 (a) 4 (b) 10 (c) 6 (d) 2
- 61 $\frac{9}{2}$ The set of natural numbers
 (a) Belong (b) Does not belong (c) subset (d) Not subset
- 62 is categorical data.
 (a) age (b) phone number (c) weight (d) favourite TV show
- 63 is numerical data
 (a) nationality (b) Place of birth (c) Exam degree (d) name
- 64 The LCM of any two different prime numbers is
 (a) 1 (b) The product of them (c) The smallest number (d) The greatest number
- 65 The dividend in $321 \div 12 = 26 \text{ R}9$ is
 (a) 321 (b) 12 (c) 26 (d) 9
- 66 is the better measure of centre for data set with outlier values.
 (a) Median (b) Range (c) Mode (d) mean
- 67 Which of the following is nearest to zero ?
 (a) 5 (b) -1 (c) -3 (d) 3
- 68 The best subset for the number 0 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers



- 69 Which of the following is the greatest number ?
 (a) -5.3 (b) -3.5 (c) 3.5 (d) 5.3
- 70 Which of the following is the smallest number ?
 (a) -3.2 (b) -2.3 (c) -0.5 (d) -0.01
- 71 The best subset for the number -3 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 72 The range can not be found using.....
 (a) dot plot (b) histogram (c) box plot (d) all of them
- 73 If the mean of 8, 6, x, 5 is 5, then x =
 (a) 1 (b) 2 (c) 3 (d) 4
- 74 The mean of the values "54, 32, 30, 4" is.....
 (a) 18 (b) 30 (c) 4 (d) 54
- 75 The LCM of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 76 The GCF of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 77 The common factor of all number is
 (a) 0 (b) 1 (c) 2 (d) 100
- 78 If the cost of one ticket "h" and the total cost of 5 tickets "m", Then the independent variable is.....
 (a) m (b) h (c) 5 (d) 5h
- 79 If the cost of one ticket "h", then total cost of 5 tickets is
 (a) m (b) h (c) 5 (d) 5h
- 80 The order pair which satisfies the equation : $y = x + 2$
 (a) (0, 2) (b) (1, 1) (c) (2, 1) (d) (1, 2)
- 81 Which of the following is numerical expression ?
 (a) $3(6d + 5)$ (b) $8 + 6$ (c) $2n - 9$ (d) $4 - h$
- 82 Which of the following is algebraic expression ?
 (a) $4(6 + 5)$ (b) $4 - 1 + 2$ (c) $20 \div 9$ (d) $3h$
- 83 The integer which comes just after -1 is
 (a) 0 (b) 1 (c) -2 (d) -1



- 84 The integer that is one less than 0 is
 (a) 0 (b) 1 (c) -2 (d) -1
- 85 All counting numbers are also
 (a) natural numbers (b) Rational numbers (c) Integers (d) All of them
- 86 $|-10| > \dots\dots\dots$
 (a) $|-9.99|$ (b) $|-90|$ (c) $|-100|$ (d) $|-15|$
- 87 $5(8 + \dots\dots) \times 7$ is a numerical expression .
 (a) d (b) $4f$ (c) 5 (d) $19 + n$
- 88 $5(8 + \dots\dots) \times 7$ is a algebraic expression .
 (a) 5 (b) $5m$ (c) $18 + 2$ (d) 13
- 89 Adding 5 to third a number =
 (a) $5 + 3x$ (b) $3x + 5$ (c) $\frac{1}{3}x - 5$ (d) $\frac{1}{3}x + 5$
- 90 The distance between -6 and its opposite on the number line is
 (a) 6 (b) -6 (c) 12 (d) -12
- 91 $|-15| = m$, then $m = \dots\dots\dots$
 (a) -15 (b) 15 (c) Both a,b (d) neither
- 92 $|-x| = 5$, then $x = \dots\dots\dots$
 (a) -5 (b) 5 (c) Both a,b (d) neither
- 93 The number of terms in the expression $6d + 2 - 5n \div 4$ is terms
 (a) 1 (b) 2 (c) 3 (d) 4
- 94 The like terms in the expression $2f + 2 - 2k - 8$ is
 (a) $2f, 2k$ (b) $2, 8$ (c) $2, 2k$ (d) $2f, 2$
- 95 The constant in the expression $6d + 2 - 5n$ is
 (a) 6 (b) d (c) $5n$ (d) 2
- 96 The coefficient in the expression $6d + 2$ is
 (a) 6 (b) d (c) $6d$ (d) 2
- 97 The balance (mean) of the following date set 1, 2, 3, 4, 4, 6, 8 is.....
 (a) 2 (b) 6 (c) 4 (d) 8
- 98is another name for the mean .
 (a) Median (b) Range (c) Mode (d) Average



Question 02

Complete

- 1 6 cubed = 6^3
- 2 5 squared = 5^2
- 3 $5^2 + 6 - 2^3 =$ 23
- 4 If the number of chicken owned is "t" and the number of eggs collected daily is "h", then the independent variable is t
- 5 The lower quartile for the set of data : 5, 7, 9, 10, 12, 15, 20 is... 7 ...
- 6 The graph shows gaps and cluster is dot plot.....
- 7 The graph shows distribution and spread isbox plot.....
- 8 The upper quartile of the values "7, 1, 6, 2, 3, 1, 9" is..... 7
- 9 The median of the values "2, 7, 10, 0, 2, 5, 6, 6, 12, 1" is... 5.5 ..
- 10 If the upper quartile of the values : $x + 14, x + 10, x + 12, x + 15, x + 16, x + 11, x + 14, x + 17$ where x is a positive integer is 18.5, then $x =$ 3
- 11 $5x = 20$, then $\frac{1}{2}x =$ 2
- 12 $100x = 0$, then $12x =$ 0
- 13 $100x = 100$, then $12x =$ 12
- 14 $\frac{x}{5} = 6$, then $x =$ 30
- 15 $3n = 15$, then $n =$ 5
- 16 $X + 5.4 = 7.8$, then $x =$ 3.4
- 17 $7x = 28$, then $\frac{1}{2}x =$ 2
- 18 "F equals the product of m and 6" as an equation is $f = 6m$
- 19 The inequality that represent the negative integers is $x \leq -1$
- 20 we use..... dot plot.....to see exactly how many times each individual values occurs.
- 21 The inequality that represent the positive integers is $x \geq -1$
- 22 The smallest natural number is 0
- 23 The inequality that represent the non-negative integers is $x \geq 0$
- 24 The inequality that represent the non-positive integers is $x \leq 0$



- 25 The graph shows the 5-number summary is**box plot**.....
- 26 The graph shows the set of data in form of intervals is**histogram**.....
- 27 " Twice x added to 7 equals y " as an algebraic equation is ... **$y = 7 + 2x$**
- 28 " $m = 5d - 5$ " as an verbal is ...**m equals 5 times d decreased by 5**
- 29 In the equation : $d = \frac{5}{9}n - 8$ the dependent variable is**d**.....
- 30 The verbal phrase for $k + 10 = 12$ is**the sum of a number and 10 equals 12**
- 31 " 20 more than v equals m " in equation is **$v + 20 = m$**
- 32 The rule is " multiply by 8 " . if $x = \frac{1}{4}$,then y would be**2**.....
- 33 4 more than s equals t in equation is **$s + 4$**
- 34 The word phrase for the equation " $h = 8g$ " is ... **h equals 8 times g**...
- 35 The ordered pair which satisfies the rule: $y = x + 5$ is (1, ..**6**...)
- 36 In the rule : $y = 4x$, if $x = 1.5$ then $y = \cdots$ **6** ...
- 37 The verbal phrase for : $2m + 4 = 8$ is**double m increased by 4 equal 8**
- 38 $5 - 3\frac{2}{5} = \cdots$ **$1\frac{3}{5}$**
- 39 " z equals the sum of adding 12 to the product of 4 and y" the equation is **$z = 4y + 12$**
- 40 The dependent variable in the equation $a = 4b + \frac{1}{2}$ is.....**a**.....
- 41**range**.....= maximum value - minimum value
- 42 The maximum values for the set of values " 4,7,9,1,6" is..**9**...
- 43 The favourite colours of a number of pupils are..... **categorical**..... data.
- 44 If the mean of 5 values is 15, then the sum of these values is....**75**....
- 45 If the marks of 6 pupils in one of the tests are 29, 33,57,40,36 and 49, then the range for these marks is equal to....**28**....
- 46 The number of integers between -5 and -1 are**3**.....
- 47 The smallest counting number is**1**.....
- 48 The value of the expression $2x^2 - (2 \times 3 + 3^2)$ for $x = 3$ is**3**.....
- 49 If the price of one pen is 6 pounds , then the price of x pens is **$6x$**
- 50 If the price of 10 pens is x pounds , then the price of one pen is **$x \div 10$**
- 51 In 5^4 the base is**5**.....and the exponent is**4**.....



- 52 The base is 8 and the exponent is 3 , then the exponential form of this is 8^3
- 53 In a square the side length is x then the perimeter is $4x$ and the area is ... x^2
- 54outlier..... are the values that lie away the other values.
- 55median.....is the middle values of the data set.
- 56 The additive inverse of -6 is6.....
- 57 The additive inverse of 0 is0.....
- 58 The LCM of 5 and 7 is35.....
- 59mode.....is the value that occurs most often .
- 60 If 50 is the greatest number of data set and the range = 10 ,then The smallest number of this data set equals.....40.....
- 61 The number -2.5 in the form $\frac{a}{b}$ is $-\frac{25}{10}$
- 62 The opposite of the number 50 is-50.....
- 63 The integer which comes just before -9 is-10.....
- 64 The GCF of 5 and 7 is1.....
- 65 The outlier of the following date set 91, 94, 93, 3, 90, 99 is.....3.....
- 66 The mode of the following set "3,4, 5,3,5,7,5,9,5,3" is...3.....
- 67 The range of the set of values 6, 5, 9,4,11,3, 7 is.....8.....
- 68 If the range of a set of values is 12 and the smallest value is 8, then the largest values is.....20.....
- 69 If the sum of a group of values is 18 and the mean of these values is 3, then the number of these values is...6.....
- 70 The smallest positive integer is1.....
- 71 The smallest non-negative integer is0.....
- 72 The greatest non-positive integer is0.....
- 73 type of data is categorical..... or numerical.....
- 74 What is your favourite school subject? is a..... non-statistical..... question.
- 75 The GCF of 8 and 9 is1.....
- 76 The LCM of 8 and 9 is72.....
- 77 $864 \div 24 =$ 36.....

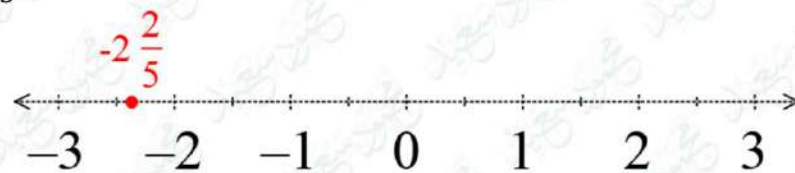


- 780.....is a multiple of all numbers .
- 791.....is a factor of all numbers .
- 80 The number of terms in the expression $6h + 2d - 3x$ is3.....terms
- 81 The constant in the expression $5f + 2b + 3$ is3.....
- 82 $|-5| + 3 =$ 8.....
- 83 The graph shows spread of the data in each quarter is... box plot....
- 84 numerical..... data is written in the form of numbers.
- 85 The types of pens preferred by your class's students is acategorical.... data.
- 86 The median of the following data set "4, 5, 7, 7, 8, 9, 9" is...7....
- 87 $|-18| \times 0 =$ 0.....
- 88 The algebraic expression of a number less than 5 is5-x.....
- 89 The algebraic expression of a number less 5 isx-5.....
- 90 The coefficient in the expression $-5d + 3$ is-5.....
- 91 The product of 5 and a number t is5t.....
- 92 Twice the difference between a number and 6 is ...2(x-6).....

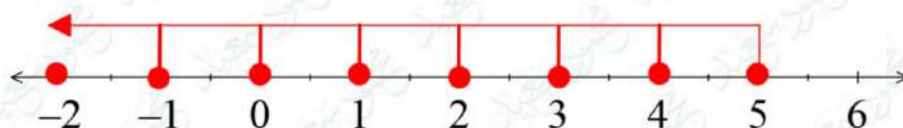
Question 03

Answer the following questions

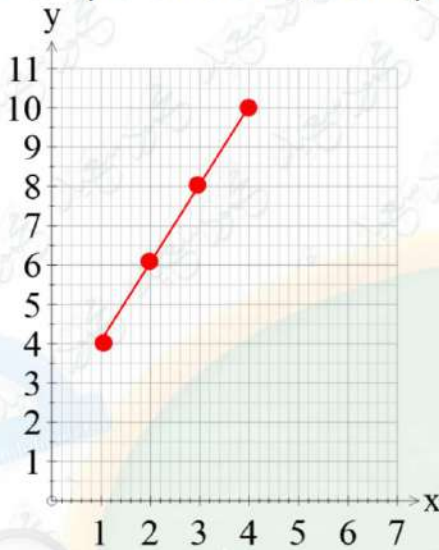
- 1** Simplify the following :
- 1) $6^2 + 2(24 - 9) \div 3$ 2) $8 - 4 \times 6 \div (5 - 3)^3$
- 1) 46 2) 5
- 2** Mohamed has x pounds . he bought a book for 60 pounds . write the algebraic expression of how much money with him now .
- X - 60**
- 3** Represent $-2\frac{2}{5}$ on the number line .



- 4 Represent $5 \geq x$ on the number line in the set of integers.



- 5 Write an equation. Use the variables x and y , where x is the independent variable .
Write the equation " add 1 and multiply by 2 " and substitute x by 1,2,3 and 4 to evaluate y .
then complete the table ,then represent the table on a graph .



Equation is : $[x+1] \times 2$

X	1	2	3	4
y	4	6	8	10

- 6 Write a verbal phrase for each of the following :

a) $f + 10 = m$

b) $b = 5 - k$

c) $2n + 8 = a$

a) 10 more than f equals m

b) b equals 5 decreased by k

c) the sum of twice n and 8 equals a

- 7 Complete the following table according to the equation : $y = 3x - 1$

X	1	3	5	7
y	2	8	14	20

- 8 Masa needed to earn at least 100 pounds daily to buy a mobile . find four possible amounts that Masa needed to earn ,then write the inequality that represented this situation .

100 , 150 , 200 , 300 - $x \geq 100$

- 9 Joudy paid 3,888 pounds to buy 24 candies . find the price of each box .

$3,888 \div 24 = 162$ pounds

- 10 Find three rational numbers between 3.5 and 3.6

3.51 , 3.52 , 3.53

- 11 Write an equation, use the variables x and y , where x is the independent and using the rule " multiply by 8 ", then substitute $x = \frac{1}{2}$ to evaluate y .

The equation is $y = 8x$, then $y = \frac{1}{2} \times 8 = 4$



12 Write each the verbal phrase as an algebraic equation :

(a) m equals twice n increased by 20

(b) y equals the product of eight and x added to 48

a) $m = 2n + 20$

b) $y = 48 + 8x$

13 When $m = 3$, solve $9 + (m^2 - 3) \div 2$

12

14 Rodina has 30 pounds , she will save 10 pounds daily . write the algebraic expression , then evaluate how much money will she have after 1 week ?

The expression is $30 + 10d$

Money with her = $30 + 10 \times 7 = 100$ pounds

15 Write a verbal phrase for each of the following equation :

a) $y = 3x + 1$

b) $y + 5 = x$

c) $g = (h \div 3) + 12$

a) y equals 3 times x increased by 1

b) the sum of y and 5 is x

c) g equals the sum of h divided by 3 and 12

16 Write an equation, use the variables x and y where x is the independent variable ,then evaluate y

a) The equation " multiply by 6", substitute if $x = 7$

b) The equation " multiply by 2 and add 3", substitute if $x = 2$

a) $y = 6x$, then $y = 6 \times 7 = 42$

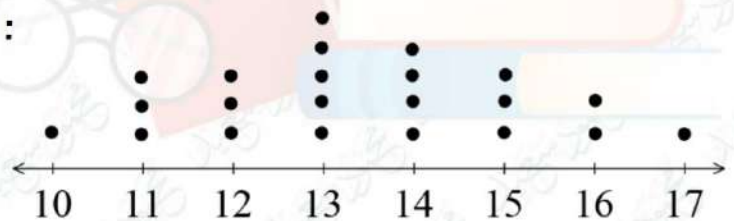
b) $y = 2x + 3$, then $y = 2 \times 2 + 3 = 7$

17 By using the opposite dot plot find :

(a) The median

(b) The mode

(c) The range



Median = 13 , mode = 13 , range = 7

18 If the number of goals registered by Al Zamalek in 6 matches are

3, 2, 6, 6, 1, 6

Calculated the mean , median and mode of the number of goals.

Mean = $24 \div 6 = 4$

Median = $9 \div 2 = 4.5$

Mode = 6



- 19 Rahma runs 3 km on Saturday, 5 km Sunday, 4 km Monday 4 km Tuesday and 4 km Friday

Find the mean distance covered by Rahma .

$$\text{Mean} = 20 \div 5 = 4$$

- 20 from the opposite box plot, complete

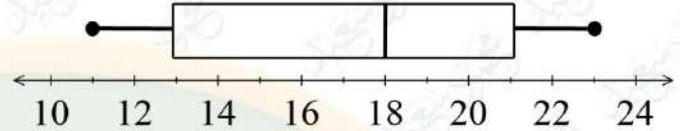
(a) The maximum value =23.....

(b) The minimum value =11.....

(c) the median =18.....

(d) the lower quarter = ...13....

(e) the upper quarter =21.....



- 21 Solve each of the following equations :

(a) $\frac{x}{4} = 3$

(b) $12x - 5 = 7$

a) $x = 12$

b) $x = 1$

- 22 from the histogram shown at the right answer the following questions .

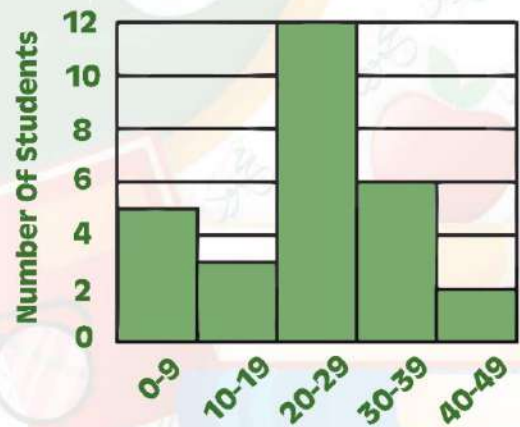
1. Which interval represents the most number of students?20-29....

2. Which interval has three students?10-19.....

3. How many students went to a pool at least 30 times last summer?8.....

4. How many students went to a pool less than ten times last summer?5.....

Number of visits to a pool
Last summer



Number Of visits

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم



Part 1

Q1- Choose the correct answer:-

- 1) Which of the following are relatively prime numbers
- a) 4 and 8 b) 12 and 18 c) 2 and 12 d) 9 and 4
- 2) Which of the following are relatively prime numbers
- a) 2 and 6 b) 15 and 30 c) 35 and 16 d) 12 and 18
- 3) Which of the following is not prime number
- a) 2 b) 5 c) 7 d) 9
- 4) $20 + 25 =$
- a) $2(0 + 5)$ b) $5(5 + 5)$ c) $5(4 + 5)$ d) $20(0 + 5)$
- 5) $(5 + 2) = 15 + 6$
- a) 2 b) 3 c) 4 d) 5
- 6) The L.C.M of 5 and 15 is
- a) 15 b) 0 c) 30 d) 1
- 7) $\frac{2}{7} + \frac{2}{7} + \frac{2}{7} + \frac{2}{7} =$
- a) $\frac{11}{28}$ b) $1\frac{1}{7}$ c) $\frac{11}{14}$ d) $\frac{10}{7}$
- 8) The equivalent fraction $\frac{12}{15}$ is
- a) $\frac{2}{5}$ b) $\frac{3}{4}$ c) $\frac{4}{5}$ d) $\frac{1}{3}$
- 9) Murad has 120 crayons , distribute them among 6 of his friends , how many crayons are left ?
- a) 1 b) 0 c) 3 d) 6
- 10) 8 and Are two relatively prime numbers
- a) 4 b) 12 c) 21 d) 24

11) The opposite of the number -8 is

- a) -8 b) 8 c) 0 d) -7

12) Which of the following is an integer ?

- a) $\frac{15}{2}$ b) $\frac{15}{3}$ c) $\frac{15}{4}$ d) $\frac{15}{6}$

13) Which of the following nearest to zero ?

- a) -4 b) 4 c) -3 d) 2

14) -3 -(-3)

- a) < b) > c) =

15) An integer included between -2 and 3

- a) -3 b) 3 c) -4 d) -1

16) The integer which comes just next -1 is

- a) -2 b) 0 c) 2 d) 1

17) The opposite of the opposite of 5 is

- a) -5 b) -(-5) c) 0 d) 10

18) The smallest number from the following is

- a) -7 b) 2 c) 1 d) -17

19) The greatest number from the following is

- a) -2 b) -1 c) -10 d) -11

20) Which of the following is the nearest to zero ?

- a) 4 b) -2 c) -3 d) 3

21) The greatest negative integer is

- a) -2 b) -(-1) c) 0 d) -1

22) The greatest non-positive is

- a) 1 b) -1 c) 0 d) -(-1)



23) The distance between the opposite of 4 and zero on the number line equals units

- a) 4 b) -4 c) 0 d) 8

24) All the following numbers are rational except

- a) 0 b) $\frac{3-3}{5}$ c) $\frac{2}{5}$ d) $\frac{4}{5-5}$

25) -4 set of counting numbers

- a) belong to b) does not belong to c) is subset of d) is not subset of

26) The best subset of the number -10 is

- a) rational b) counting c) integers d) natural

27) The best subset of the number 1 is

- a) rational b) counting c) integers d) natural

28) Each number in the set of integers is called

- a) element b) set c) subset d) not subset

29) The best subset of the number 0 is

- a) rational b) counting c) integers d) natural

30) $\frac{3}{5}$ $\frac{2}{7}$

- a) < b) > c) =

31) $-\frac{1}{4}$ $-\frac{2}{9}$

- a) < b) > c) =

32) Seif deposit 1,000 L.E. in a bank represents as

- a) 1000 b) -1000 c) 100 d) -100

33) 0.7 0.65

- a) < b) > c) =

34) is lying between 3.14 and 3.2

- a) 3.15 b) 3.21 c) 3.20 d) 3.22



- 35) The number of rational numbers lying between $\frac{2}{5}$ and $-\frac{2}{5}$ is
- a) 2 b) 1 c) 0 d) infinite number
- 36) The smallest number from the following is
- a) 0.11 b) 0.3 c) 0.101 d) $\frac{1}{2}$
- 37) The greatest number from the following is
- a) $\frac{1}{4}$ b) $\frac{1}{3}$ c) $\frac{1}{12}$ d) $\frac{1}{2}$
- 38) $0 \dots\dots\dots -2$
- a) < b) > c) =
- 39) If $|-99| = x$, then $x = \dots\dots\dots$
- a) -99 b) 99 c) 9 d) -9
- 40) $|-11| > \dots\dots\dots$
- a) 10 b) 11 c) 13 d) 101
- 41) The distance between -4 and its opposite on number line is units
- a) 0 b) 4 c) 8 d) 16
- 42) The absolute values of opposites are
- a) equal b) negative c) different
- 43) A negative number with an absolute value greater than 10 is
- a) 10 b) 11 c) -9 d) -12
- 44) The absolute value of the opposite of -7 is
- a) 7 b) -7 c) 14 d) -14
- 45) The set of integers consists of negative numbers and numbers
- a) natural b) counting c) rational d) positive
- 46) Which of the following is counting number
- a) 0 b) -1 c) 1 d) -2

47) $-3\frac{1}{2}$ lies between two whole numbers

- a) 0 and 1 b) -2 and -3 c) 3 and 4 d) -3 and -4

48) The number of integers lies between $\frac{3}{5}$ and $\frac{16}{5}$

- a) 0 b) 3 c) 2 d) infinite

49) The number of integers lies between 3.1 and 3.2

- a) 0 b) 3 c) 2 d) infinite

50) Which of the following is an algebraic expression

- a) $44 - 3 \times 4$ b) $3 + 7 - 0$ c) $15a - 32$ d) $2(3 - 4)$

51) The number of like terms in the expression $3 + 2x + 5$ is

- a) 1 b) 2 c) 3 d) 4

52) Which of the following are like terms ?

- a) 25, 52 b) l, m c) ab, aq d) ab, ac

53) $2 + 3$ (.....) complete to get numeric expression

- a) a b) x c) $20 - 15$ d) $a + x$

54) Twice the difference of a number and 5 is

- a) $2Y + 5$ b) $2Y - 5$ c) $2(Y - 5)$ d) $2(Y + 5)$

55) Yara saved n L.E. and her mother gave her 5 L.E. she will have

- a) $n - 5$ b) $n + 5$ c) $5 - n$ d) $5n$

56) Nada is X years old now how old will she be after 6 years ?

- a) $x - 6$ b) $6x$ c) $6 + x$ d) $6 - x$

57) $5^4 =$

- a) 4^5 b) 4×5 c) $5 \times 5 \times 5 \times 5$ d) $5 \times 5 \times 5 \times 5 \times 5$

58) The value of the expression $3n - 2$ for $n = 7$ is

- a) 14 b) 19 c) 21 d) 23



- 59) The first operation you perform in the expression $5(3^2 - 2) + 7$ is
- a) add b) multiply c) subtract d) exponent
- 60) The value of the expression $2X^2 - (3 \times 4 + 2^3) = \dots\dots\dots$ at $X = 5$
- a) 50 b) 30 c) 40 d) 35
- 61) $8 - 3 \times 2 \div (4 - 2)^2 = \dots\dots\dots$
- a) 2.5 b) 1 c) 0.5 d) 6.5
- 62) Two cubed added to 5 squared equals =
- a) $2 \times 3 + 5 \times 5$ b) $3^2 + 2^5$ c) $2^3 + 5^2$ d) $2^3 + 5^4$
- 63) The coefficient in the expression $6 - 3 + 5X$ is
- a) 6, 3 b) $5X$ c) 5 d) X
- 64) Number of like terms in the expression $4a + 4b + 5$ is
- a) 3 b) 2 c) 1 d) 0
- 65) Subtract 8 from the number k in algebraic form
- a) $8 - k$ b) $k - 8$ c) $8 + k$ d) $8k$
- 66) Marwan has 50 L.E. he bought 3 pens each for k L.E. then the remainder is
- a) 30 b) $3 + 50k$ c) $50 - 3k$ d) $50 + 3k$
- 67) Take away twice the number k from 15 is written as
- a) $2k - 15$ b) $15 + 2k$ c) $15 - 2k$ d) $15 - k^2$
- 68) 5 times a number less 7 is
- a) $5b + 7$ b) $5b - 7$ c) $7 - 5b$ d) $7 - b^2$
- 69) The value of the expression $5 + (X^2 - 3) = \dots\dots\dots$ at $X = 3$
- a) 6 b) 9 c) 12 d) 11
- 70) $7 + 3(\dots\dots\dots + 5) - 4$ complete to get numeric expression
- a) b b) k^3 c) $10 - 6$ d) $x + y$

71) If $25 \div b = 5$, then $b =$

- a) 20 b) 5 c) 40 d) 1

72) If $3X = 12$, then $\frac{1}{2} X =$

- a) 9 b) 6 c) 4 d) 2

73) If $y \div 2 = 8$, then $\frac{1}{4} y =$

- a) 8 b) 6 c) 4 d) 2

74) A number if added to 17 , the sum is 28 then the number is

- a) 11 b) 18 c) 45 d) 18

75) A product of a number x and 6 is 42 , then $x =$

- a) 6 b) 7 c) 48 d) 36

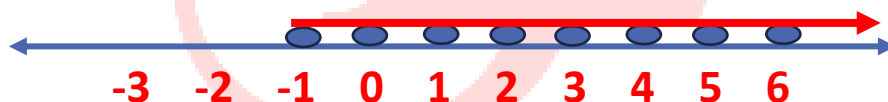
76) Which of the following is a solution of inequality $m \geq -1$?

- a) -2 b) -3 c) -4 d) 0

77) All of the following are solutions of inequality $m < -3$ except

- a) -2 b) -10 c) -5 d) -6

78) The inequality that represent the graph is



- a) $k < -1$ b) $k > -1$ c) $k \leq -1$ d) $k \geq -1$

79) Number of solutions of inequality $s > 10$ is

- a) 2 b) 1 c) 0 d) infinite

80) Is a solution of $x < 4$

- a) 3.96 b) 4 c) 4.23 d) 5

81) All of the following are solutions of inequality $m < -3$ except

- a) -4 b) -3 c) 4 d) 5

82) If $3x = 0$, then $\frac{1}{2}x =$

- a) 3 b) -3 c) $1\frac{1}{2}$ d) 0

83) Mohamed has 47 pounds , his friend has less than mohamed , then his friend has

- a) 53 b) 47 c) 100 d) 19

84) A number is no more than 10 can be written as

- a) $x < 10$ b) $x > 10$ c) $x \leq 10$ d) $x \geq 10$

85) In the equation $x = 4y + 3$, the independent is

- a) 4 b) x c) y d) 3

86) In the equation $9a + 24 = b$, the dependent is

- a) 9 b) a c) 24 d) b

87) 8 more than S equals T in equation is

- a) $8S = T$ b) $8 + S = T$ c) $8T = 8$ d) $8 + T = S$

88) M equals the product of n and 3 in equation is

- a) $m = 3n$ b) $m = 3 + n$ c) $n = 3 + m$ d) $n = 3m$

89) 4 times L added to 7 equals k , in equation is

- a) $7L + 4 = k$ b) $7k + 4 = L$ c) $4L + 7 = K$ d) $4k + 7 = L$

90) The word phrase for the equation $g = 9h$ is

- a) h equals g b) g equals 9 c) h equals 9 d) g equals h
increased by 9 times h times g increased by 9

91) In the equation $y = 3x$,if $x = 5.1$,then y would be

- a) 8.1 b) 53.1 c) 18.3 d) 15.3

92) The ordered pair which satisfies the equation $y = x + 1$ is

- a) $(1, 0)$ b) $(1, 2)$ c) $(1, 1)$ d) $(2, 1)$



93) In the equation $y = -2x$, y equals 8 where $x =$

- a) 2 b) 4 c) 6 d) 8

94) In the equation $y = 3x + 6.4$, if $x = 1$, then y would be

- a) 6.4 b) 18.4 c) 19.2 d) 9.4

95) In the equation $y = \frac{1}{2}x + 1$, if $x = 12$, then y would be

- a) 6.5 b) 13 c) 7 d) 6

96) If the equation $y = x + 4$ is represented by the following table, then $a =$

- a) 6 b) 5 c) 2 d) 8

x	0	2	3
y	4	a	7

97) The equation which represents the following table is

- a) $y = x + 2$ b) $y = 2x$ c) $y = 2x + 1$ d) $y = \frac{x}{2} + 2$

x	1	2	3
y	3	5	7

Q2- Complete the following :-

1) $3548 \div 23 =$ R 6

2) $984 \div 5 =$ R

3) $264 \div 65 =$ R

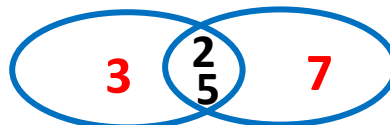
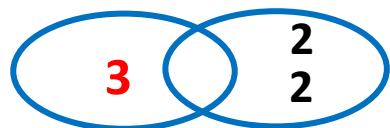
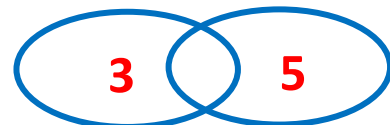
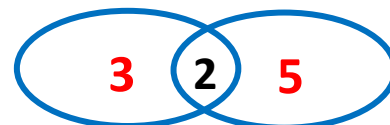
4) $1515 \div 15 =$

5) The divisor in the equation $16,692 \div 52 = 321$ is

6) If the price of 15 boxes 3,645, then the price of each one is

7) A merchant paid 7,420 L.E. to buy 53 boxes of mango, then the price of each box is, and if each box contains 5 kg of mango then the price of each kg is

- 8) The LCM of 5 and 7 is
- 9) Factors of 18 are
- 10) A number whose prime factors are 2,3,5 is
- 11) The smallest prime number is
- 12) The prime number has factors
- 13) The common factor of all numbers is
- 14) The greatest common factor of two prime numbers is
- 15) is a multiple of any number
- 16) The GCF of 15 and 10 is
- 17) The LCM of 8 and 18 is
- 18) In the opposite venn diagram the GCF is
- 19) In the opposite venn diagram the LCM is
- 20) In the opposite venn diagram the GCF is
- 21) Yara saves 105 L.E. weekly , so she saves daily
- 22) $3 (2 + 5) = \dots \times \dots + \dots \times \dots$
- 23) From the opposite venn diagram the expression is
- 24) The greatest common factor of 6 and 8 is
- 25) $6 (7 + 9) = 42 + \dots$
- 26) $\dots (5 + 2) = 15 + 6$
- 27) $30 + 50 = \dots (\dots + \dots)$
- 28) $5 (2 + \dots) = 10 + 35$
- 29) $9 (1 + 2) = 9 + \dots$
- 30) $\frac{2}{5} + \frac{3}{10} = \dots$
- 31) $\frac{3}{4} - \frac{5}{8} = \dots$



32) $3\frac{1}{4} + 7\frac{1}{3} = \dots\dots\dots$

33) The smallest non negative integer is

34) The opposite of zero is

35) The smallest natural number is, the smallest counting number is

36) The smallest positive integer is, the greatest negative integer is

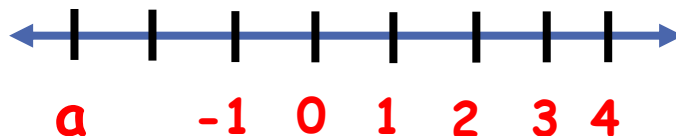
37) The number neither negative nor positive

38) The integer which just next (after) -4 is

39) The integer which just before -10 is

40) The number of integers between -4 and 3 is

41) The opposite number line ,
the integer which represents a is



42) Set of counting numbers is of set of rational numbers .

43) Set of natural numbers is of set of counting numbers .

44) Set of rational numbers is of set of integers .

45) Set of integers is of set of rational numbers .

46) 0 to set of rational numbers .

47) $\frac{15}{3}$ to set of counting numbers .

48) $|-6|$ to set of natural numbers .

49) The rational number -4.7 lies between two integers and

50) $4 = \dots\dots\dots$ (write in fraction form $\frac{a}{b}$)

51) $2\frac{1}{4} = \dots\dots\dots$ (write in fraction form $\frac{a}{b}$)

52) $-1.5 = \dots\dots\dots$ (write in fraction form $\frac{a}{b}$)

53) The opposite of $|\frac{1}{2}|$ is

54) $|-2| \times 0 = \dots\dots\dots$

55) If $|x| = 4$, the $x = \dots\dots\dots$ or

56) $|-5| - 5 = \dots\dots\dots$

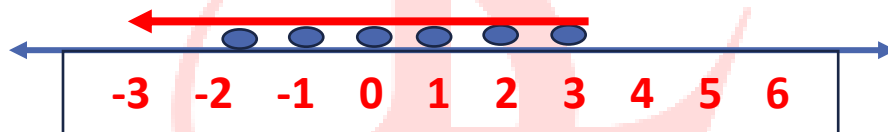
57) $0 \times |-3| = \dots\dots\dots$

58) $|-2| + |-13| = \dots\dots\dots$



- 59) $|-30| \div |-5| = \dots\dots\dots$
- 60) $|-9| > \dots\dots\dots$
- 61) The constant in the expression $2X + 5$ is $\dots\dots\dots$
- 62) The number of terms in expression $5 - 2m - 3m - 4$ is $\dots\dots\dots$ terms
- 63) The coefficient in the algebraic expression $4X + 3$ is $\dots\dots\dots$
- 64) $5(4 + 6)$ is $\dots\dots\dots$ expression
- 65) $2m - 3$ is $\dots\dots\dots$ expression
- 66) The verbal expression for $2m - 7$ is $\dots\dots\dots$
- 67) The algebraic expression for a number less 7 is $\dots\dots\dots$
- 68) Seif works X hours daily , then the algebraic expression for the number of worked hours monthly is $\dots\dots\dots$
- 69) Write the algebraic expression for subtract 7 from the double of number X $\dots\dots\dots$
- 70) Write the algebraic expression for 8 decreased by 3 times a number M $\dots\dots\dots$
- 71) Write the algebraic expression for twice the sum of a number and 3 $\dots\dots\dots$
- 72) $2^3 = \dots\dots\dots$
- 73) The value of expression $X + 3^2$ if $X = 1$ is $\dots\dots\dots$
- 74) $(17 - 11) + 3 \times 2^4 \div 2^3 = \dots\dots\dots$
- 75) The value of expression $4(3X + 1) = \dots\dots\dots$ at $X = 1$
- 76) Five squared = $\dots\dots\dots$
- 77) The two like algebraic terms in $5 - 4X + 2^3$ are $\dots\dots\dots$
- 78) If the price of a piece of tart is 18 L.E. then the algebraic expression represent the price of n pieces is $\dots\dots\dots$
- 79) If the base is 7 , the exponent is 5 then the exponential form is $\dots\dots\dots$
- 80) $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 3^{\dots\dots\dots}$
- 81) Area of the square whose side length 7 cm in the exponential form is $\dots\dots\dots \text{ cm}^2$
- 82) The volume of cube whose edge length 5 cm is $\dots\dots\dots$

- 83) 5 cubed =
- 84) If $X + 2 = 9$, then $X =$
- 85) If $Y - 3 = 10$, then $Y =$
- 86) If $9Z = 63$ then $Z =$
- 87) If $\frac{k}{8} = 7$, then $K =$
- 88) Yara bought 3 pens for X L.E. each , she paid 15 L.E. , then $X =$
- 89) If $x + x + x = 18$, then $x =$
- 90) If $\frac{X}{3} = 4$, then twice $X =$
- 91) If $k + 1 = 5$, then $k - 3 =$
- 92) If $m - 3^2 = 1$, then $m =$
- 93) The number of solutions of equation $x + 3 = 5$ is / are solution(s)
- 94) The algebraic expression of subtract 3 from k is
- 95) $4k = 20$, then $k =$
- 96) Seif saved X L.E. and his father gave him 6 L.E. , he will has
- 97) The inequality that represents the following graph is



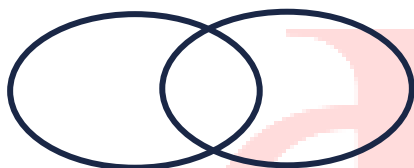
- 98) is a solution of inequality $X < -3$
- 99) $\frac{3}{4}x = \frac{3}{4}$, then $2X =$
- 100) A number if add to 7 , the sum is 13 , then the number is
- 101) 7 more than x equals y as an algebraic equation is
- 102) Five times c equals d as an algebraic equation is
- 103) m equals twice n increased by 25 as an algebraic equation is
- 104) S equals the product of eight and r added to 42 as an algebraic equation is
- 105) In the equation . $t = 20p$, the dependent is
- 106) In the equation . $m = 11n + 2$, the independent is
- 107) In the equation $y = 2 + x$,if $x = 3$, then y would be



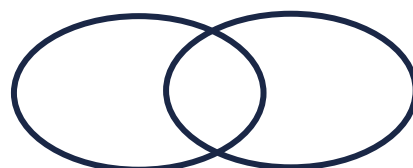
- 108) The verbal phrase for $Y = 3x + 1$ is
- 109) The verbal phrase for $y + 2 = x$ is
- 110) In the rule : $y = 4x$, if $x = 1.3$ m ,then $y =$
- 111) The ordered pair which satisfies the rule : $y = x + 3$ is (1 ,)

Q3- Find the G.C.F using venn diagram :-

10 and 30



7 and 12



Q4- Answer the following :-

- 1- Yara has 24 pens and 16 rules , she wants to put them in groups , what the greatest number of groups that can be made so that each group has the same number of items ? how many pens will be in each group ? how many ruler will be in each group ? and write the numerical expression which represents the total number of items .

.....

.....

.....

.....

- 2- Use the venn diagram to find G.C.F & L.C.M of 15 and 10

.....

.....

.....

- 3- Seif ate $\frac{1}{4}$ of the cake and Maria ate $\frac{1}{3}$ of the same cake , how much of the cake has been eaten ? and how much left ?

.....

.....

Q5- Arrange in ascendeing order :-

1) -6 , 0 , -4 , 4 , -7 , 3
.....

2) 7 , -7 , -3 , -5 , 11 , -11
.....

3) $-\frac{1}{2}$, $-\frac{1}{3}$, -1 , $\frac{1}{4}$
.....

Q6- Find two rational numbers lying between:-

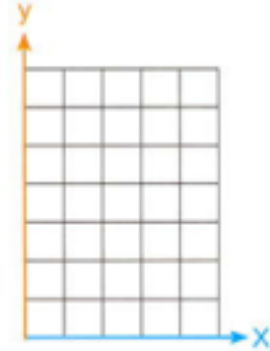
1) $\frac{2}{3}$ and $\frac{5}{6}$
.....
.....
.....

2) 3.75 and 3.76
.....
.....
.....

Q7- Complete the following tables then make the graph :-

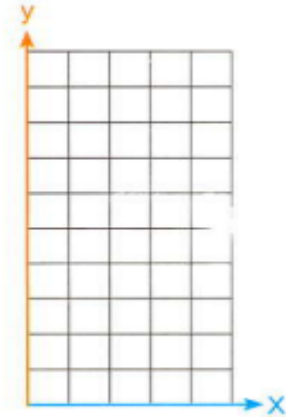
1) The equation is $Y = x + 2$

x	0	1	2
y			
(x,y)			



2) The equation is $Y = 2x$

x	1	3	5
y			
(x,y)			



Part 2

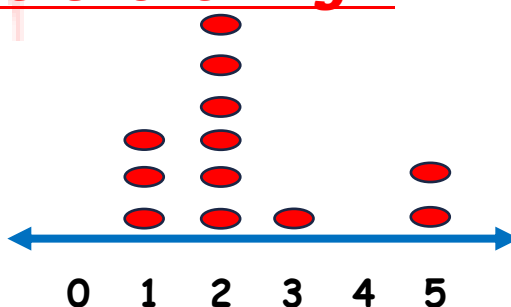
statistical

Q1- Identify which question is statistical or non statistical :-

- 1) How tall are you ?
- 2) How tall are the students in your class ?
- 3) What do the students prefer to eat for lunch ?

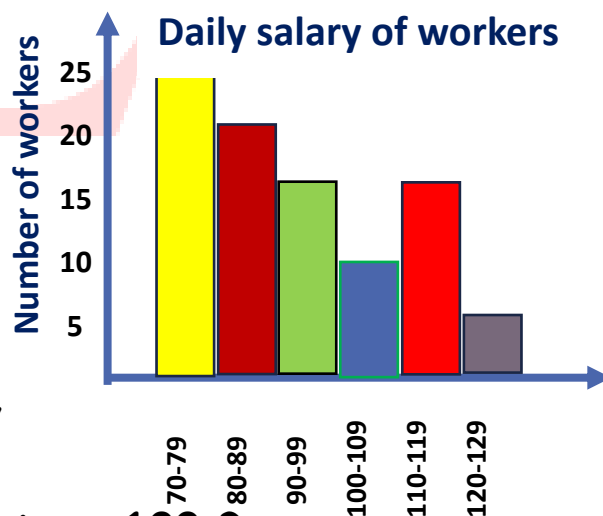
Q2-From the opposite graph answer the following :-

- 1) how many students were surveyed ?
- 2) how many students had 3 siblings ?
- 3) how many students had more than 1 sibling ?
- 4) how many students had 2 siblings or more?
- 5) how many students had less than 3 siblings



Q3-From the opposite graph answer the following :-

- 1) The total number of worker is
- 2) The daily salary interval maximum Number of workers is
- 3) The number of workers whose daily Salary is 90 or more =
- 4) The number of workers whose daily Salary is less than 120 =
- 5) The intervals having the least frequency Are
- 6) How many workers whose daily salary at least 100 ?

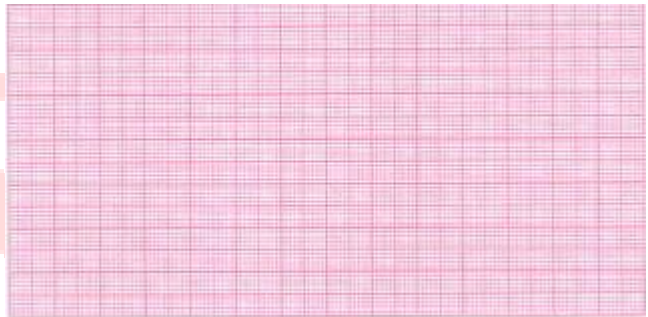


Q4- The following data represents the ages of 30 workers in a company

marks	21	22	23	24	25	26	27	29	30
Number of students	3	5	2	6	1	4	1	3	5

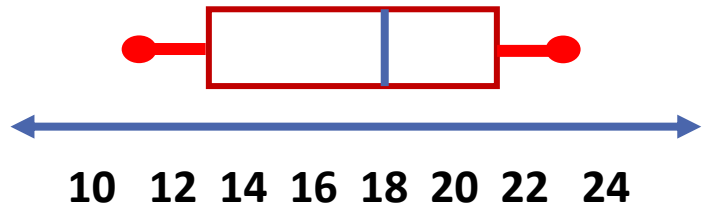
- a) Complete the table
b) Draw a histogram to represent data

Intervals	Frequency



Q5- From the opposite Box plot complete :-

- 1) The minimum value =
- 2) The maximum value =
- 3) The median =
- 4) The lower quartile =
- 5) The upper quartile =

**Q6- Find the 5-number summary for the following data and draw the box plot**

4 , 5 , 7 , 10 , 12 , 13 , 14 , 16 , 18

Q7- Choose the correct answer :-

- 1) Which display makes it easier to see the median ?
 a) histogram b) dot plot c) bar graph d) box plot
- 2) The mean of the data set 7 , 13 , 6 and 2 is7
 a) 2 b) 6 c) 7 d) 13
- 3) If the mean of 8 , 6 , x and 5 is 5 , then x =1
 a) 4 b) 3 c) 2 d) 1
- 4) The balance of the data set 5 , 7 , 6 , 8 , 6 and 10 is
 a) 7 b) 5 c) 8 d) 10
- 5) The average of 11, 12, 14, 14, 14, 15, 16 and 16 is
 a) 11 b) 14 c) 13 d) 15
- 6) If the mean of the marks of 5 students is 20 marks , then the sum of their marks equals marks 100
 a) 4 b) 15 c) 25 d) 100

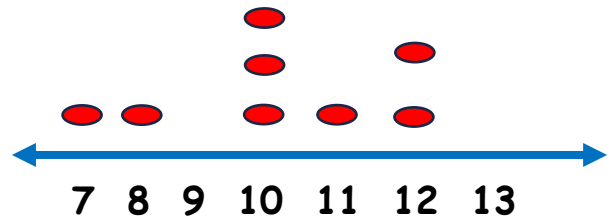


- 7) If the mean of the ages of Hanan and Wesam is 7 years and the age of Hanan is 8 years , then the age of Wesam is6
a) 7 b) 15 c) 6 d) 8
- 8) If the mean of the side lengths of a triangle is 8 cm , then the perimeter of the triangle is
a) 8 cm b) 18 cm c) 24 cm d) 15 cm
- 9) A set of values with two modes are is called
a) bimodal b) trimodal c) multimodal d) non-modal
- 10) The mode of the following data set (3,4 ,5 ,3 ,5 ,7 ,5 ,9 ,5 ,2) is
a) 3 b) 5 c) 7 d) 9
- 11) The range = the greatest value the smallest value.
a) + b) - c) \times d) \div
- 12) If the values of data set start from 30 to 60, then the range of this data =
a) 30 b) 20 c) 60 d) 90

Q8- Complete the following :-

- 1) The median of the values 4 , 7 , 8 , 1 and 3 is
- 2) The median of $a + 1$, $a + 2$, $a + 3$ is 10 then $a =$
- 3) The lower quartile for the set of data 5,7,9,10,12,15,20 is
- 4) Types of statistical questions are and
- 5) The shape shows the set of data in form of intervals is
- 6) The shape shows individual data is
- 7) The shape shows the median is
- 8) The shape shows number of individual data is
- 9) The shape shows lower quartile is
- 10) The shape shows the five-number summary is

11) The mean of the following data is



12) The balance of the data set 15 , 16 , 18 , 18 , 19 , 20 , 20 is

13) If the mean of 8,6, x,5 is 5 then $x =$

14) The average of the values 10 , 10 , 10 , 10 is

15) The median of values 5 , 3 , 3 , 8 , 4 , 7 , 1 and 10 is

16) The sum of seven numbers is 49 , then the mean of these numbers is

17) If the sum of five numbers is 30 , then the mean of these numbers is

18) are values that lie away the other values

19) The outlier value of the data set (7,46 ,48 ,49,50 ,51 ,52) is

20) The two outlier values of this data set (31 ,205 ,207 ,200 ,201 ,206,202,209 ,1,0001) are and

21) is the measure of central tendency changed more with the outlier.

22) The better measure of central tendency for data set with outlier value is

23) is the better measure of central tendency for data set with no outlier value .

24) The is the value that occurs most often.

25) The mode of (7,10,15,7,10,13,7,15,7) is

26) The range of the set of values 6 , 5 , 9 , 4 , 11 ,3 and 7 is

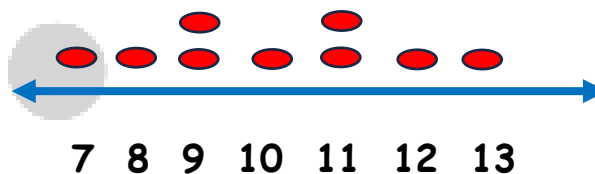
27) If 50 is the greatest number of data set and the range = 10 'then the smallest number of this data set equals

28) The range =

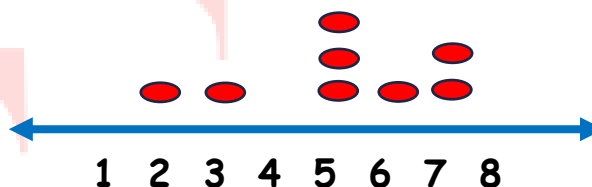
29) The difference between the greatest value and the smallest value in data set is

30) is the middle value of the data set

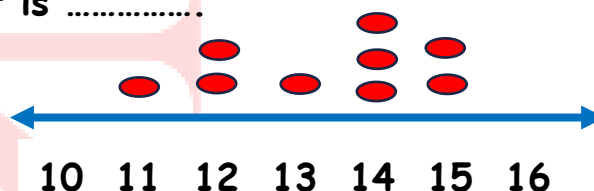
31) The median of the following data which is represented by dot plot is



32) The mean of the following data equals



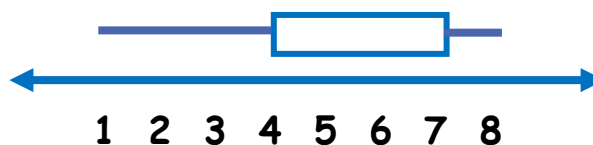
33) The mode of the opposite data set is



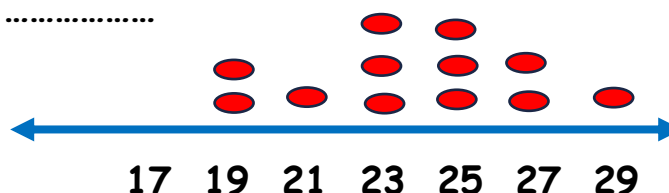
34) From the following dot plot, the best measure of central tendency and its value =



35) In the opposite box plot , the range =



36) In the opposite data, the range =



Part 1

Q1- Choose the correct answer:-

- 1) Which of the following are relatively prime numbers
- a) 4 and 8 b) 12 and 18 c) 2 and 12 d) 9 and 4
- 2) Which of the following are relatively prime numbers
- a) 2 and 6 b) 15 and 30 c) 35 and 16 d) 12 and 18
- 3) Which of the following is not prime number
- a) 2 b) 5 c) 7 d) 9
- 4) $20 + 25 =$
- a) $2(0 + 5)$ b) $5(5 + 5)$ c) $5(4 + 5)$ d) $20(0 + 5)$
- 5) $(5 + 2) = 15 + 6$
- a) 2 b) 3 c) 4 d) 5
- 6) The L.C.M of 5 and 15 is
- a) 15 b) 0 c) 30 d) 1
- 7) $\frac{2}{7} + \frac{2}{7} + \frac{2}{7} + \frac{2}{7} =$
- a) $\frac{11}{28}$ b) $1\frac{1}{7}$ c) $\frac{11}{14}$ d) $\frac{10}{7}$
- 8) The equivalent fraction $\frac{12}{15}$ is
- a) $\frac{2}{5}$ b) $\frac{3}{4}$ c) $\frac{4}{5}$ d) $\frac{1}{3}$
- 9) Murad has 120 crayons , distribute them among 6 of his friends , how many crayons are left ?
- a) 1 b) 0 c) 3 d) 6
- 10) 8 and Are two relatively prime numbers
- a) 4 b) 12 c) 21 d) 24

11) The opposite of the number -8 is

- a) -8 b) 8 c) 0 d) -7

12) Which of the following is an integer ?

- a) $\frac{15}{2}$ b) $\frac{15}{3}$ c) $\frac{15}{4}$ d) $\frac{15}{6}$

13) Which of the following nearest to zero ?

- a) -4 b) 4 c) -3 d) 2

14) -3 -(-3)

- a) < b) > c) =

15) An integer included between -2 and 3

- a) -3 b) 3 c) -4 d) -1

16) The integer which comes just next -1 is

- a) -2 b) 0 c) 2 d) 1

17) The opposite of the opposite of 5 is

- a) -5 b) -(-5) c) 0 d) 10

18) The smallest number from the following is

- a) -7 b) 2 c) 1 d) -17

19) The greatest number from the following is

- a) -2 b) -1 c) -10 d) -11

20) Which of the following is the nearest to zero ?

- a) 4 b) -2 c) -3 d) 3

21) The greatest negative integer is

- a) -2 b) -(-1) c) 0 d) -1

22) The greatest non-positive is

- a) 1 b) -1 c) 0 d) -(-1)



23) The distance between the opposite of 4 and zero on the number line equals units

- a) 4 b) -4 c) 0 d) 8

24) All the following numbers are rational except

- a) 0 b) $\frac{3-3}{5}$ c) $\frac{2}{5}$ d) $\frac{4}{5-5}$

25) -4 set of counting numbers

- a) belong to b) does not belong to c) is subset of d) is not subset of

26) The best subset of the number -10 is

- a) rational b) counting c) integers d) natural

27) The best subset of the number 1 is

- a) rational b) counting c) integers d) natural

28) Each number in the set of integers is called

- a) element b) set c) subset d) not subset

29) The best subset of the number 0 is

- a) rational b) counting c) integers d) natural

30) $\frac{3}{5}$ $\frac{2}{7}$

- a) < b) > c) =

31) $-\frac{1}{4}$ $-\frac{2}{9}$

- a) < b) > c) =

32) Seif deposit 1,000 L.E. in a bank represents as

- a) 1000 b) -1000 c) 100 d) -100

33) 0.7 0.65

- a) < b) > c) =

34) is lying between 3.14 and 3.2

- a) 3.15 b) 3.21 c) 3.20 d) 3.22

- 35) The number of rational numbers lying between $\frac{2}{5}$ and $-\frac{2}{5}$ is
a) 2 b) 1 c) 0 d) infinite number
- 36) The smallest number from the following is
a) 0.11 b) 0.3 c) 0.101 d) $\frac{1}{2}$
- 37) The greatest number from the following is
a) $\frac{1}{4}$ b) $\frac{1}{3}$ c) $\frac{1}{12}$ d) $\frac{1}{2}$
- 38) 0 -2
a) < b) > c) =
- 39) If $|-99| = x$, then $x =$
a) -99 b) 99 c) 9 d) -9
- 40) $|-11| >$
a) 10 b) 11 c) 13 d) 101
- 41) The distance between -4 and its opposite on number line is units
a) 0 b) 4 c) 8 d) 16
- 42) The absolute values of opposites are
a) equal b) negative c) different
- 43) A negative number with an absolute value greater than 10 is
a) 10 b) 11 c) -9 d) -12
- 44) The absolute value of the opposite of -7 is
a) 7 b) -7 c) 14 d) -14
- 45) The set of integers consists of negative numbers and numbers
a) natural b) counting c) rational d) positive
- 46) Which of the following is counting number
a) 0 b) -1 c) 1 d) -2



47) $-3\frac{1}{2}$ lies between two whole numbers

- a) 0 and 1 b) -2 and -3 c) 3 and 4 d) -3 and -4

48) The number of integers lies between $\frac{3}{5}$ and $\frac{16}{5}$

- a) 0 b) 3 c) 2 d) infinite

49) The number of integers lies between 3.1 and 3.2

- a) 0 b) 3 c) 2 d) infinite

50) Which of the following is an algebraic expression

- a) $44 - 3 \times 4$ b) $3 + 7 - 0$ c) $15a - 32$ d) $2(3 - 4)$

51) The number of like terms in the expression $3 + 2x + 5$ is

- a) 1 b) 2 c) 3 d) 4

52) Which of the following are like terms ?

- a) 25, 52 b) l, m c) ab, aq d) ab, ac

53) $2 + 3$ (.....) complete to get numeric expression

- a) a b) x c) $20 - 15$ d) $a + x$

54) Twice the difference of a number and 5 is

- a) $2Y + 5$ b) $2Y - 5$ c) $2(Y - 5)$ d) $2(Y + 5)$

55) Yara saved n L.E. and her mother gave her 5 L.E. she will have

- a) $n - 5$ b) $n + 5$ c) $5 - n$ d) $5n$

56) Nada is X years old now how old will she be after 6 years ?

- a) $x - 6$ b) $6x$ c) $6 + x$ d) $6 - x$

57) $5^4 =$

- a) 4^5 b) 4×5 c) $5 \times 5 \times 5 \times 5$ d) $5 \times 5 \times 5 \times 5$

58) The value of the expression $3n - 2$ for $n = 7$ is

- a) 14 b) 19 c) 21 d) 23



- 59) The first operation you perform in the expression $5(3^2 - 2) + 7$ is
- a) add b) multiply c) subtract d) exponent
- 60) The value of the expression $2X^2 - (3 \times 4 + 2^3) = \dots\dots\dots$ at $X = 5$
- a) 50 b) 30 c) 40 d) 35
- 61) $8 - 3 \times 2 \div (4 - 2)^2 = \dots\dots\dots$
- a) 2.5 b) 1 c) 0.5 d) 6.5
- 62) Two cubed added to 5 squared equals =
- a) $2 \times 3 + 5 \times 5$ b) $3^2 + 2^5$ c) $2^3 + 5^2$ d) $2^3 + 5^4$
- 63) The coefficient in the expression $6 - 3 + 5X$ is
- a) 6, 3 b) $5X$ c) 5 d) X
- 64) Number of like terms in the expression $4a + 4b + 5$ is
- a) 3 b) 2 c) 1 d) 0
- 65) Subtract 8 from the number k in algebraic form
- a) $8 - k$ b) $k - 8$ c) $8 + k$ d) $8k$
- 66) Marwan has 50 L.E. he bought 3 pens each for k L.E. then the remainder is
- a) 30 b) $3 + 50k$ c) $50 - 3k$ d) $50 + 3k$
- 67) Take away twice the number k from 15 is written as
- a) $2k - 15$ b) $15 + 2k$ c) $15 - 2k$ d) $15 - k^2$
- 68) 5 times a number less 7 is
- a) $5b + 7$ b) $5b - 7$ c) $7 - 5b$ d) $7 - b^2$
- 69) The value of the expression $5 + (X^2 - 3) = \dots\dots\dots$ at $X = 3$
- a) 6 b) 9 c) 12 d) 11
- 70) $7 + 3(\dots\dots\dots + 5) - 4$ complete to get numeric expression
- a) b b) k^3 c) $10 - 6$ d) $x + y$

71) If $25 \div b = 5$, then $b =$

- a) 20 b) 5 c) 40 d) 1

72) If $3X = 12$, then $\frac{1}{2} X =$

- a) 9 b) 6 c) 4 d) 2

73) If $y \div 2 = 8$, then $\frac{1}{4} y =$

- a) 8 b) 6 c) 4 d) 2

74) A number if added to 17 , the sum is 28 then the number is

- a) 11 b) 18 c) 45 d) 18

75) A product of a number x and 6 is 42 , then $x =$

- a) 6 b) 7 c) 48 d) 36

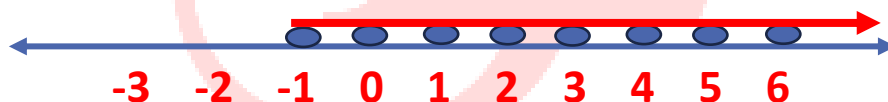
76) Which of the following is a solution of inequality $m \geq -1$?

- a) -2 b) -3 c) -4 d) 0

77) All of the following are solutions of inequality $m < -3$ except

- a) -2 b) -10 c) -5 d) -6

78) The inequality that represent the graph is



- a) $k < -1$ b) $k > -1$ c) $k \leq -1$ d) $k \geq -1$

79) Number of solutions of inequality $s > 10$ is

- a) 2 b) 1 c) 0 d) infinite

80) Is a solution of $x < 4$

- a) 3.96 b) 4 c) 4.23 d) 5



81) All of the following are solutions of inequality $m < -3$ except

- a) $|-4|$ b) -3 c) 4 d) 5

82) If $3x = 0$, then $\frac{1}{2}x =$

- a) 3 b) -3 c) $1\frac{1}{2}$ d) 0

83) Mohamed has 47 pounds , his friend has less than mohamed , then his friend has

- a) 53 b) 47 c) 100 d) 19

84) A number is no more than 10 can be written as

- a) $x < 10$ b) $x > 10$ c) $x \leq 10$ d) $x \geq 10$

85) In the equation $x = 4y + 3$, the independent is

- a) 4 b) x c) y d) 3

86) In the equation $9a + 24 = b$, the dependent is

- a) 9 b) a c) 24 d) b

87) 8 more than S equals T in equation is

- a) $8S = T$ b) $8 + S = T$ c) $8T = 8$ d) $8 + T = S$

88) M equals the product of n and 3 in equation is

- a) $m = 3n$ b) $m = 3 + n$ c) $n = 3 + m$ d) $n = 3m$

89) 4 times L added to 7 equals k , in equation is

- a) $7L + 4 = k$ b) $7k + 4 = L$ c) $4L + 7 = K$ d) $4k + 7 = L$

90) The word phrase for the equation $g = 9h$ is

- a) h equals g b) g equals 9 c) h equals 9 d) g equals h
increased by 9 times h times g increased by 9

91) In the equation $y = 3x$,if $x = 5.1$,then y would be

- a) 8.1 b) 53.1 c) 18.3 d) 15.3

92) The ordered pair which satisfies the equation $y = x + 1$ is

- a) (1, 0) b) (1, 2) c) (1, 1) d) (2, 1)



93) In the equation $y = -2x$, y equals 8 where $x =$

- a) -2 b) 4 c) 6 d) -4

94) In the equation $y = 3x + 6.4$, if $x = 1$, then y would be

- a) 6.4 b) 18.4 c) 19.2 d) 9.4

95) In the equation $y = \frac{1}{2}x + 1$, if $x = 12$, then y would be

- a) 6.5 b) 13 c) 7 d) 6

96) If the equation $y = x + 4$ is represented by the following table, then a =

- a) 6 b) 5 c) 2 d) 8

x	0	2	3
y	4	a	7

97) The equation which represents the following table is

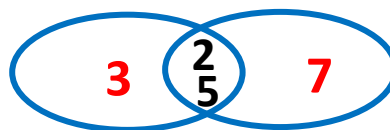
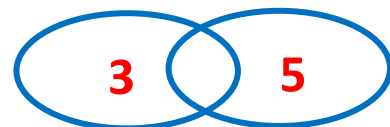
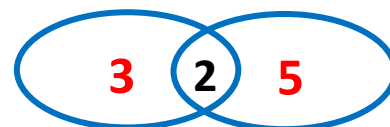
- a) $y = x + 2$ b) $y = 2x$ c) $y = 2x + 1$ d) $y = \frac{x}{2} + 2$

x	1	2	3
y	3	5	7

Q2- Complete the following :-

- 1) $3548 \div 23 = (154) R 6$
- 2) $984 \div 5 = (196) R (4)$
- 3) $264 \div 65 = (4) R (4)$
- 4) $1515 \div 15 = (101)$
- 5) The divisor in the equation $16,692 \div 52 = 321$ is (52)
- 6) If the price of 15 boxes 3,645, then the price of each one is (3,645 \div 15= 243)

- 7) A merchant paid 7,420 L.E. to buy 53 boxes of mango , then the price of each box is (140) , and if each box contains 5 kg of mango then the price of each kg is (28)
- 8) The LCM of 5 and 7 is (35)
- 9) Factors of 18 are (1,2,3,6,9 and 18)
- 10) A number whose prime factors are 2,3,5 is (30)
- 11) The smallest prime number is (2)
- 12) The prime number has (2) factors
- 13) The common factor of all numbers is (1)
- 14) The greatest common factor of two prime numbers is (1)
- 15) (0) is a multiple of any number
- 16) The GCF of 15 and 10 is (5)
- 17) The LCM of 8 and 18 is (72)
- 18) In the opposite venn diagram the GCF is (2)
- 19) In the opposite venn diagram the LCM is (15)
- 20) In the opposite venn diagram the GCF is (1)
- 21) Yara saves 105 L.E. weekly , so she saves daily ($105 \div 7 = 15$ L.E)
- 22) $3 (2 + 5) = 3 \times 2 + 3 \times 5$
- 23) From the opposite venn diagram the expression is $10(3+7)$
- 24) The greatest common factor of 6 and 8 is (2)
- 25) $6 (7 + 9) = 42 + 54$
- 26) $3 (5 + 2) = 15 + 6$
- 27) $30 + 50 = 10 (3 + 5)$
- 28) $5 (2 + 7) = 10 + 35$
- 29) $9 (1 + 2) = 9 + 18$



30) $\frac{2}{5} + \frac{3}{10} = \frac{7}{10}$

31) $\frac{3}{4} - \frac{5}{8} = \frac{1}{8}$

32) $3\frac{1}{4} + 7\frac{1}{3} = 10\frac{7}{12}$

33) The smallest non negative integer is (0)

34) The opposite of zero is (0)

35) The smallest natural number is (0), the smallest counting number is (1)

36) The smallest positive integer is (1), the greatest negative integer is -1

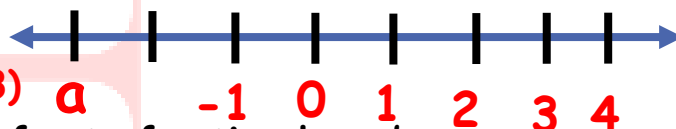
37) The number (0) neither negative nor positive

38) The integer which just next (after) -4 is (-3)

39) The integer which just before -10 is (-11)

40) The number of integers between -4 and 3 is (6)

41) The opposite number line ,



the integer which represents a is (-3) a

42) Set of counting numbers is (subset) of set of rational numbers .

43) Set of natural numbers is (not subset) of set of counting numbers .

44) Set of rational numbers is (not subset) of set of integers .

45) Set of integers is (subset) of set of rational numbers .

46) 0 (belongs) to set of rational numbers .

47) $\frac{15}{3}$ (belongs) to set of counting numbers .

48) $|-6|$ (belongs) to set of natural numbers .

49) The rational number -4.7 lies between two integers (-4) and (-5)

50) $4 = \frac{4}{1}$ (write in fraction form $\frac{a}{b}$)

51) $2\frac{1}{4} = \frac{9}{4}$ (write in fraction form $\frac{a}{b}$)

52) $-1.5 = -\frac{15}{10}$ (write in fraction form $\frac{a}{b}$)

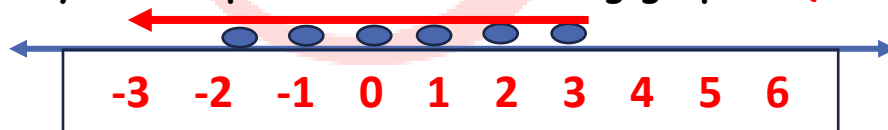
53) The opposite of $|\frac{1}{2}|$ is $\frac{1}{2}$

54) $|-2| \times 0 = (0)$

55) If $|x| = 4$, the $x = (-4)$ or (4)

- 56) $|-5| - 5 = (0)$
- 57) $0 \times |-3| = (0)$
- 58) $|-2| + |-13| = (15)$
- 59) $|-30| \div |-5| = (6)$
- 60) $|-9| > (8)$
- 61) The constant in the expression $2X + 5$ is **(5)**
- 62) The number of terms in expression $5-2m-3m-4$ is **(4)** terms
- 63) The coefficient in the algebraic expression $4X + 3$ is **(4)**
- 64) $5 (4 + 6)$ is **(numeric)** expression
- 65) $2m - 3$ is **(algebraic)** expression
- 66) The verbal expression for $2m - 7$ is **(the product of two and m decreased by 7)**
- 67) The algebraic expression for a number less 7 is **($x - 7$)**
- 68) Seif works X hours daily , then the algebraic expression for the number of worked hours monthly is **($30X$)**
- 69) Write the algebraic expression for subtract 7 from the double of number X **($2x - 7$)**
- 70) Write the algebraic expression for 8 decreased by 3 times a number M **($8 - 3m$)**
- 71) Write the algebraic expression for twice the sum of a number and 3 **($2(x+3)$)**
- 72) $2^3 = (8)$
- 73) The value of expression $X + 3^2$ if $X = 1$ is **(10)**
- 74) $(17 - 11) + 3 \times 2^4 \div 2^3 = (12)$
- 75) The value of expression $4 (3X + 1) = (16)$ at $X = 1$
- 76) Five squared = **(25)**
- 77) The two like algebraic terms in $5 - 4X + 2^3$ are **(5 and 2^3)**
- 78) If the price of a piece of tart is 18 L.E.then the algebraic expression represent the price of n pieces is **($18n$)**
- 79) If the base is 7 , the exponent is 5 then the exponential form is **7^5**

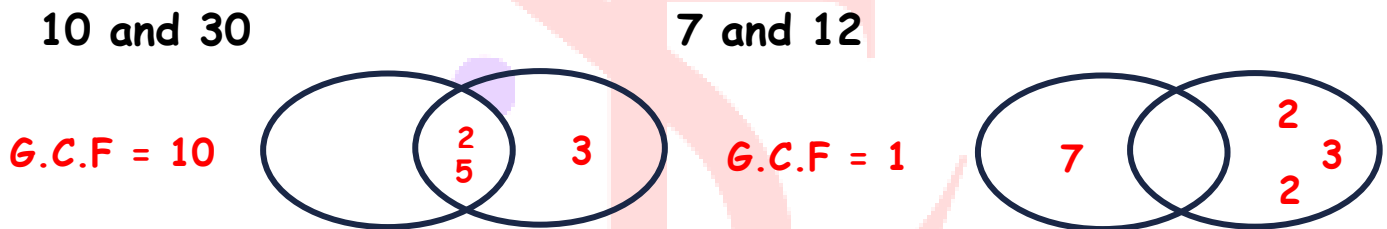
- 80) $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 3^7$
- 81) Area of the square whose side length 7 cm in the exponential form is 7^2 cm^2
- 82) The volume of cube whose edge length 5 cm is ($5^3=125$)
- 83) 5 cubed = 5^3
- 84) If $X + 2 = 9$, then $X = (7)$
- 85) If $Y - 3 = 10$, then $Y = (13)$
- 86) If $9Z = 63$ then $Z = (7)$
- 87) If $\frac{k}{8} = 7$, then $K = (56)$
- 88) Yara bought 3 pens for X L.E. each , she paid 15 L.E. , then $X = (3x=15) \ x=5$
- 89) If $x + x + x = 18$, then $x = (6)$
- 90) If $\frac{x}{3} = 4$, then twice $X = (24)$
- 91) If $k + 1 = 5$, then $k - 3 = (1)$
- 92) If $m - 3^2 = 1$, then $m = (10)$
- 93) The number of solutions of equation $x + 3 = 5$ is / are (one) solution(s)
- 94) The algebraic expression of subtract 3 from k is ($k - 3$)
- 95) $4k = 20$, then $k = (5)$
- 96) Seif saved X L.E. and his father gave him 6 L.E. , he will has ($x+6$)
- 97) The inequality that represents the following graph is ($X \leq 3$)



- 98) (-4) is a solution of inequality $X < -3$
- 99) $\frac{3}{4}x = \frac{3}{4}$, then $2X = (2)$
- 100) A number if add to 7 , the sum is 13 , then the number is (6)
- 101) 7 more than x equals y as an algebraic equation is ($7 + x = y$)
- 102) Five times c equals d as an algebraic equation is ($5c=d$)
- 103) m equals twice n increased by 25 as an algebraic equation is ($m=2n+25$)

- 104) S equals the product of eight and r added to 42 as an algebraic equation is ($s=8r+42$)
- 105) In the equation $t = 20p$, the dependent is (t)
- 106) In the equation $m = 11n + 2$, the independent is (n)
- 107) In the equation $y = 2 + x$,if $x = 3$, then y would be (5)
- 108) The verbal phrase for $Y = 3x + 1$ is (y equals the product of three and x increased by one)
- 109) The verbal phrase for $y + 2 = x$ is (y more than two equals x)
- 110) In the rule $y = 4x$, if $x = 1.3$ m ,then y = (5.2)
- 111) The ordered pair which satisfies the rule $y = x + 3$ is (1 , 4)

Q3- Find the G.C.F using venn diagram :-



Q4- Answer the following :-

- 4- Yara has 24 pens and 16 rulers , she wants to put them in groups , what the greatest number of groups that can be made so that each group has the same number of items ? how many pens will be in each group ? how many ruler will be in each group ? and write the numerical expression which represents the total number of items .

... $24=2 \times 2 \times 2 \times 3$ $16=2 \times 2 \times 2 \times 2$The greatest number of groups = 8...

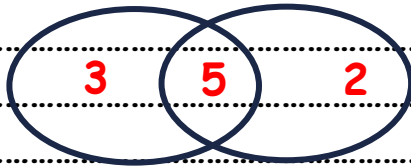
...The number of pens in each group = 3.....

...The number of rulers in each group = 2.....

...The numerical expression = $8 (3 + 2)$



5- Use the venn diagram to find **G.C.F** & **L.C.M** of 15 and 10



$$\text{G.C.F} = 5$$

$$\text{L.C.M} = 30$$

6- Seif ate $\frac{1}{4}$ of the cake and Maria ate $\frac{1}{3}$ of the same cake , how much of the cake has been eaten ? and how much left ?

$$\left(\frac{1}{4} + \frac{1}{3}\right) = \left(\frac{3}{12} + \frac{4}{12} = \frac{7}{12}\right) = \left(\frac{12}{12} - \frac{7}{12} = \frac{5}{12}\right)$$

Q5- Arrange in ascendeing order :-

4) -6 , 0 , -4 , 4 , -7 , 3

-7 , -6 , -4 , 0 , 3 , 4

5) 7 , -7 , -3 , -5 , 11 , -11

-11 , -7 , -5 , -3 , 7 , 11

6) $-\frac{1}{2}$, $-\frac{1}{3}$, -1 , $\frac{1}{4}$

-1 , $-\frac{1}{2}$, $-\frac{1}{3}$, $\frac{1}{4}$

Q6- Find two rational numbers lying between:-

3) $\frac{2}{3}$ and $\frac{5}{6}$

$\frac{4}{6}$ and $\frac{5}{6}$

$\times 3$

$\frac{12}{18}$ and $\frac{15}{18}$

The two rational numbers are

$\frac{13}{18}$ and $\frac{14}{18}$

4) 3.75 and 3.76

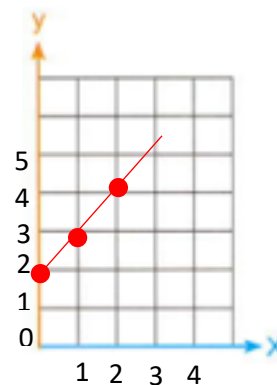
3.750 and 3.760

The two rational numbers are

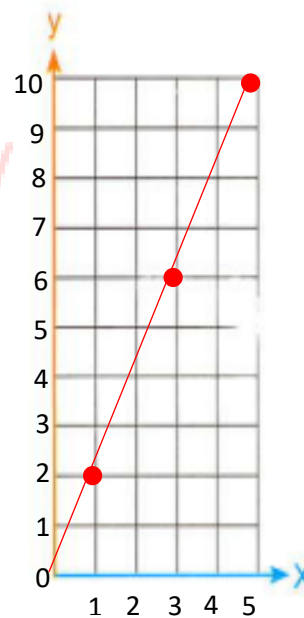
3.751 and 3.752

Q7- Complete the following tables then make the graph :-3) The equation is $Y = x + 2$

x	0	1	2
y	2	3	4
(x,y)	(0,2)	(1,3)	(2,4)

4) The equation is $Y = 2x$

x	1	3	5
y	2	6	10
(x,y)	(1,2)	(3,6)	(5,10)



Part 2

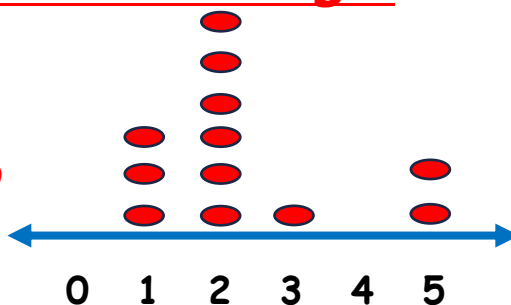
statistical

Q1- Identify which question is statistical or non statistical :-

- 1) How tall are you ? (Non-statistical)
- 2) How tall are the students in your class ? (statistical)
- 3) What do the students prefer to eat for lunch ? (statistical)

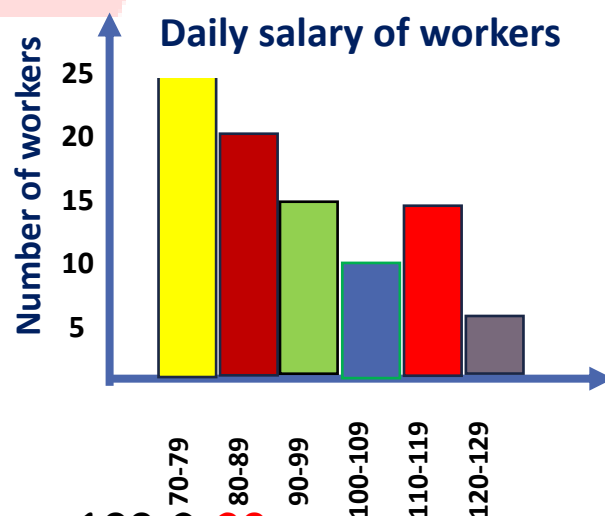
Q2-From the opposite graph answer the following :-

- 1) how many students were surveyed ? 12
- 2) how many students had 3 siblings ? 1
- 3) how many students had more than 1 sibling ? 9
- 4) how many students had 2 siblings or more? 9
- 5) how many students had less than 3 siblings? 9



Q3-From the opposite graph answer the following :-

- 1) The total number of worker is 90
- 2) The daily salary interval has maximum Number of workers is (70-79)
- 3) The number of workers whose daily Salary is 90 or more = 45
- 4) The number of workers whose daily Salary is less than 120 = 85
- 5) The intervals having the least frequency Are (120-129)
- 6) How many workers whose daily salary at least 100 ? 30

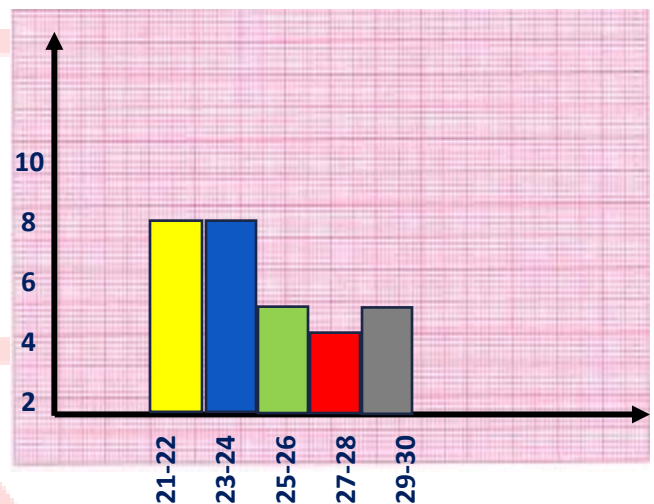


Q4- The following data represents the ages of 30 workers in a company

marks	21	22	23	24	25	26	27	29	30
Number of students	3	5	2	6	1	4	1	3	5

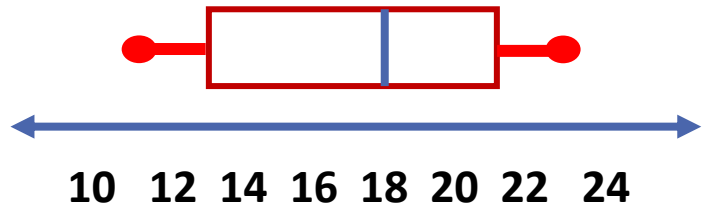
- a) Complete the table
b) Draw a histogram to represent data

Intervals	Frequency
21-22	8
23-24	8
25-26	5
27-28	4
29-30	5



Q5- From the opposite Box plot complete :-

- 1) The minimum value = 11
- 2) The maximum value = 23
- 3) The median = 18
- 4) The lower quartile = 13
- 5) The upper quartile = 21

**Q6- Find the 5-number summary for the following data and draw the box plot**

4 , 5 , 7 , 10 , 12 , 13 , 14 , 16 , 18

The minimum = 4

the maximum = 18

the median = 12

The lower quartile Q_1 = 6

the upper quartile Q_3 = 15

Q7- Choose the correct answer :-

- 1) Which display makes it easier to see the median ?
a) histogram b) dot plot c) bar graph d) box plot
- 2) The mean of the data set 7 , 13 , 6 and 2 is7
a) 2 b) 6 c) 7 d) 13
- 3) If the mean of 8 , 6 , x and 5 is 5 , then x =1
a) 4 b) 3 c) 2 d) 1
- 4) The balance of the data set 5 , 7 , 6 , 8 , 6 and 10 is
a) 7 b) 5 c) 8 d) 10
- 5) The average of 11, 12, 14, 14, 14, 14, 15, 16 and 16 is
a) 11 b) 14 c) 13 d) 15
- 6) If the mean of the marks of 5 students is 20 marks , then the sum of their marks equals marks 100
a) 4 b) 15 c) 25 d) 100

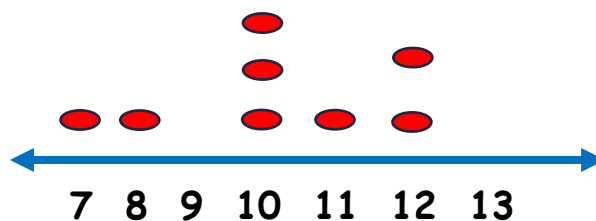


- 7) If the mean of the ages of Hanan and Wesam is 7 years and the age of Hanan is 8 years , then the age of Wesam is6
a) 7 b) 15 c) 6 d) 8
- 8) If the mean of the side lengths of a triangle is 8 cm , then the perimeter of the triangle is
a) 8 cm b) 18 cm c) 24 cm d) 15 cm
- 9) A set of values with two modes is called
a) bimodal b) trimodal c) multimodal d) non-modal
- 10) The mode of the following data set (3,4 ,5 ,3 ,5 ,7 ,5 ,9 ,5 ,2) is
a) 3 b) 5 c) 7 d) 9
- 11) The range = the greatest value the smallest value.
a) + b) - c) × d) ÷
- 12) If the values of data set start from 30 to 60, then the range of this data =
a) 30 b) 20 c) 60 d) 90

Q8- Complete the following :-

- 1) The median of the values 4 , 7 , 8 , 1 and 3 is (8)
- 2) The median of $a + 1$, $a + 2$, $a + 3$ is 10 then $a =$ (8)
- 3) The lower quartile for the set of data 5,7,9,10,12,15,20 is (7)
- 4) Types of statistical questions are (numerical) and (categorical)
- 5) The shape shows the set of data in form of intervals is (histogram)
- 6) The shape shows individual data is (dot plot)
- 7) The shape shows the median is (dot plot & box plot)
- 8) The shape shows number of individual data is (dot plot & histogram)
- 9) The shape shows lower quartile is (box plot)
- 10) The shape shows the five-number summary is (box plot)

11) The mean of the following data is (10)



12) The balance of the data set 15 , 16 , 18 , 18 , 19 , 20 , 20 is (18)

13) If the mean of 8,6, x,5 is 5 then $x =$ (1)

14) The average of the values 10 , 10 , 10 , 10 is (10)

15) The median of values 5 , 3 , 3 , 8 , 4 , 7 , 1 and 10 is (6)

16) The sum of seven numbers is 49 , then the mean of these numbers is (7)

17) If the sum of five numbers is 30 , then the mean of these numbers is (6)

18) **outlier** are values that lie away the other values

19) The outlier value of the data set (7,46 ,48 ,49,50 ,51 ,52) is (7)

20) The two outlier values of this data set (31 ,205 ,207 ,200 ,201 ,206,202,209 , 1,0001) are (31) and (1,0001)

21) **(mean)** is the measure of central tendency changes more with the outlier.

22) The better measure of central tendency for data set with outlier value is **(median)**

23) **(mean)** is the better measure of central tendency for data set with no outlier value .

24) The **(mode)** is the value that occurs most often.

25) The mode of (7,10,15,7,10,13,7,15,7) is (7)

26) The range of the set of values 6 , 5 , 9 , 4 , 11 ,3 and 7 is (8)

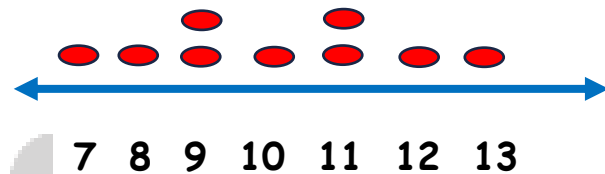
27) If 50 is the greatest number of data set and the range = 10 'then the smallest number of this data set equals (40)

28) The range = **(maximum value - minimum value)**

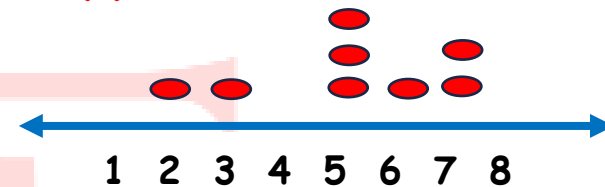
29) The difference between the greatest value and the smallest value in data set is called **(range)**

30) (median) is the middle value of the data set

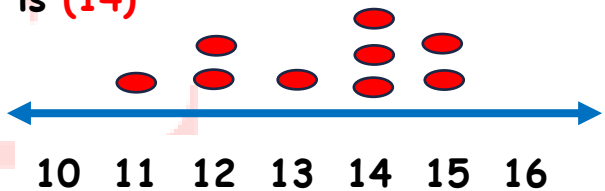
31) The median of the following data which is represented by dot plot is
...(10)



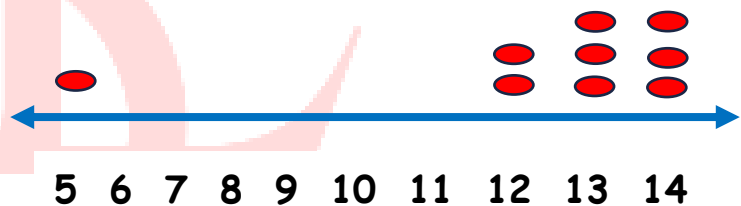
32) The mean of the following data equals (5)



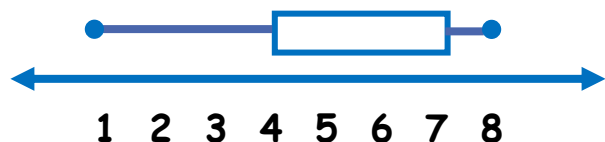
33) The mode of the opposite data set is (14)



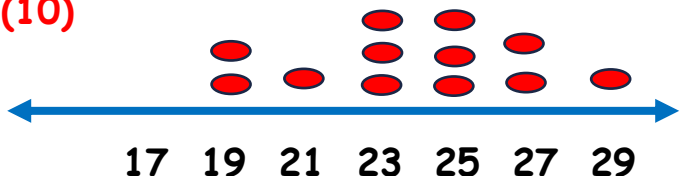
34) From the following dot plot, the best measure of central tendency
(median) and its value = (13)



35) In the opposite box plot, the range = (7)



36) In the opposite data, the range = (10)



Q1: Choose the correct answer:

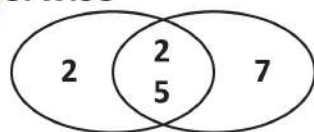
- 1 Murad has 120 crayons distribute them among 6 of his friends, how many crayons are left?
☐ a 0 ☐ b 1 ☐ c 2 ☐ d 3
- 2 The common multiple of all factors is
☐ a 0 ☐ b 1 ☐ c 2 ☐ d 3
- 3 The value of the expression $2 + 16 - 3b$ when $b = 4$ is
☐ a 4 ☐ b 2 ☐ c 6 ☐ d 10
- 4 Laila saved n L.E. and her mother gave her 5 L.E. , she will have L.E
☐ a $n - 5$ ☐ b $n + 5$ ☐ c $5n$ ☐ d $5 - n$
- 5 The following expression represents the greatest number of bags can be made from potatoes and carrot respectively: $(6 \times 6) + (6 \times 3)$ then the total number of carrots in all bags is
☐ a 6 ☐ b 36 ☐ c 18 ☐ d 9
- 6 The greatest common factor of 6 and 8 is
☐ a 4 ☐ b 1 ☐ c 2 ☐ d 3
- 7 The smallest non-negative integer is
☐ a -1 ☐ b 1 ☐ c 0 ☐ d -10
- 8 An integer included between -4 and 2 is
☐ a -1 ☐ b 2 ☐ c 3 ☐ d -5
- 9 The number of integers on the number line is
☐ a 1 ☐ b 2 ☐ c 100 ☐ d infinite
- 10 The first operation or exponent you perform in $3 \times 5 + 3(2^3 - 5) - 4 \div 2$
☐ a parantheses ☐ b plus ☐ c multiply ☐ d exponent
- 11 The best graph to represent the number of students absent on a sunday
☐ a bag graph ☐ b dot plots ☐ c histogram ☐ d otherwise
- 12 The lower quartile for the set of data : 72, 64, 79, 63, 60, 75, 70, 61, 77 is
☐ a 61 ☐ b 70 ☐ c 62 ☐ d 76



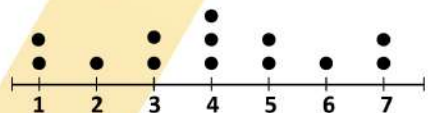
- 13** The absolute value of 6.3 is
☐ a 6.3 ☐ b -3.6 ☐ c -6.3 ☐ d 3.6
- 14** Youssef can read more than 7 books monthly. Which inequality represent the number of books that Youssef read monthly ?
☐ a $x > 7$ ☐ b $x < 7$ ☐ c $x \leq 7$ ☐ d $x \geq 7$
- 15** All of the following are solutions of inequality $x > -2$ except
☐ a -1 ☐ b -3 ☐ c 0 ☐ d 1
- 16** In the equation : $y = 3x + 1$, the ordered pair (2, a) satisfies the equation, then a =
☐ a 5 ☐ b 6 ☐ c 7 ☐ d 8
- 17** are numerical data
☐ a blood type ☐ b birthplace ☐ c age ☐ d preferred colors
- 18** What is your favorite school subject? is a question.
☐ a Statistical ☐ b Non-statistical
- 19** The mean of the values (4, 9, 7, 1, 1, 2) is
☐ a 4 ☐ b 2 ☐ c 3 ☐ d 24
- 20** The number of integer numbers lying between $\frac{3}{5}$ and $\frac{16}{5}$ is
☐ a 0 ☐ b 2 ☐ c 3 ☐ d infinite
- 21** The equation which represents the table
- | | | | |
|---|---|---|---|
| x | 1 | 2 | 3 |
| y | 3 | 5 | 7 |
- ☐ a $y = x + 2$ ☐ b $y = 2x$ ☐ c $y = 2x + 1$ ☐ d $y = 2x - 1$
- 22** The smallest counting number is
☐ a 0 ☐ b 1 ☐ c 3 ☐ d -1
- 23** Eslam is x years old now , how old will he be after 6 years ?
☐ a $x \div 6$ ☐ b $6x$ ☐ c $x + 6$ ☐ d $x - 6$
- 24** Murad and farida have 70 pounds, if what Murad has is k pounds, then what farida has is pounds.
☐ a $70 + k$ ☐ b $70 - k$ ☐ c $70k$ ☐ d $70 \div k$



- 25** The constant in the expression $3y + 5$ is
- ☐ a 3 ☐ b 5 ☐ c $3y$ ☐ d $3y + 5$
- 26** If the mean of the scores of five students is 20, then the sum of their
- ☐ a 4 ☐ b 25 ☐ c 15 ☐ d 100
- 27** If the largest value is 18 and the least value is 6, then the range is
- ☐ a 12 ☐ b 24 ☐ c 3 ☐ d 78
- 28** 7^3 =
- ☐ a 7×7 ☐ b 3^7 ☐ c 7^3 ☐ d 49
- 29** If $4n = 12$, then $6n =$
- ☐ a 4 ☐ b 12 ☐ c 18 ☐ d 3
- 30** Which display makes it easier to see the median?
- ☐ a histogram ☐ b box plot ☐ c dot plot ☐ d bar graph
- 31** The larger absolute value, the zero.
- ☐ a closer to ☐ b farther to ☐ c equal to ☐ d otherwise
- 32** From the opposite venn diagram, the expression is
- ☐ a $10(6 + 35)$ ☐ b $3(10 + 7)$ ☐ c $7(10 + 3)$ ☐ d $10(2 + 7)$
- 33** $13,510 \div 23 = 587 R$
- ☐ a 8 ☐ b 9 ☐ c 7 ☐ d 6
- 34** If the upper quartile of the values: $k + 2, k + 3, k + 5, k + 4, k + 6$, where k is a positive integer is 15.5, then $k =$
- ☐ a 8 ☐ b 9 ☐ c 7 ☐ d 10
- 35** Which of the following is not a solution of $k > 2.5$?
- ☐ a 3 ☐ b 2.7 ☐ c 2.49 ☐ d 4.9
- 36** 4 and are two relatively prime numbers.
- ☐ a 12 ☐ b 8 ☐ c 9 ☐ d 28
- 37** The LCM of two relatively prime numbers is
- ☐ a 0 ☐ b 1 ☐ c their sum ☐ d their product



- 38** If $63 \div k = 9$, then $k = \dots\dots\dots$
☐ a 8 ☐ b 9 ☐ c 7 ☐ d 6
- 39** Mohamed has 47 L.E, his friend Mina has less money than Mohamed, then Mina may has L.E
☐ a 53 ☐ b 47 ☐ c 100 ☐ d 19
- 40** The number of terms of the expression: $5 - 2m - 3m + 4$ is
☐ a 5 ☐ b -2 ☐ c -3 ☐ d 4
- 41** A negative number with an absolute value greater than 13 is
☐ a 10 ☐ b -9 ☐ c 17 ☐ d -14
- 42** If the values of data set start from 40 to 80, then the range of this data =
☐ a 60 ☐ b 40 ☐ c 120 ☐ d 80
- 43** In the equation: $1,600 \div 25 = 64$, the divisor is
☐ a 1,600 ☐ b 64 ☐ c 0 ☐ d 25
- 44** If the median of $a + 1$, $a + 2$, $a + 3$ is 10, then $a = \dots\dots\dots$
☐ a 1 ☐ b 2 ☐ c 3 ☐ d 4
- 45** The smallest natural number is
☐ a -1 ☐ b 0 ☐ c 1 ☐ d 2
- 46** If the mean of 8, 6, x , 5 is 5, then value of $x = \dots\dots\dots$
☐ a 1 ☐ b 2 ☐ c 3 ☐ d 4
- 47** Which of the following is equivalent to the expression: $5x + 3 + x$?
☐ a $6x + 2$ ☐ b $8x + x$ ☐ c $3(2x + 1)$ ☐ d $9x$
- 48** The smallest non-negative integer is
☐ a 0 ☐ b 1 ☐ c 2 ☐ d -1
- 49** -5 is located to the right of the number on the number line.
☐ a -6 ☐ b 4 ☐ c -4 ☐ d 6
- 50** All integers are numbers
☐ a counting ☐ b natural ☐ c even ☐ d rational
- 51** The sum of any two opposite numbers is
☐ a 1 ☐ b 2 ☐ c 0 ☐ d -1

- 52** If the sum of a set of values is 36, and the mean of these value is 4, then the number of these value is
- (a) 6 (b) 4 (c) 9 (d) 36
- 53** The set of counting numbers the set of natural numbers.
- (a) belong to (b) subset to (c) not belong to (d) not subset to
- 54** The distance between the opposite of 4 and 0 is
- (a) -4 (b) 4 (c) 0 (d) 8
- 55** The number of rational numbers lying between $\frac{3}{5}$ and $\frac{4}{5}$
- (a) 0 (b) 2 (c) 3 (d) infinite
- 56** Twice the difference of a number and 5 is
- (a) $2y + 5$ (b) $2y - 5$ (c) $2(y + 5)$ (d) $2(y - 5)$
- 57** The inequality representing negative numbers are
- (a) $y > 0$ (b) $y < 0$ (c) $y \leq 0$ (d) $y \geq 0$
- 58** The will be the best choice as a measure of central tendency in the opposite figure.
- 
- (a) mean (b) median (c) range (d) both mean & median
- 59** $2\frac{3}{4} + \dots = 5\frac{1}{2}$
- (a) $2\frac{3}{4}$ (b) $2\frac{1}{2}$ (c) $3\frac{3}{4}$ (d) $3\frac{1}{2}$
- 60** "m equals the product of n and 3" in equation is
- (a) $m = 3n$ (b) $m = 3 + n$ (c) $n = 3m$ (d) $n = m + 3$
- 61** is lying between 3.14 and 3.2
- (a) 3.15 (b) 3.21 (c) 3.20 (d) 3.22
- 62** A does not have vertical axis.
- (a) dot plot (b) bar graph (c) histogram (d) double bar graph
- 63** The outlier of the following value (2, 5, 54, 3, 8, 6) is
- (a) 8 (b) 2 (c) 54 (d) none



64 is a solution of $x < -1$

- a** 0 **b** 1 **c** -2 **d** 3

65 The values (5, 3, 2, 5, 2, 7) have

- a** no mode **b** one modes **c** two modes **d** three modes

66 The oppsite of $|-5|$ is

- a** 5 **b** -5 **c** 0 **d** otherwise

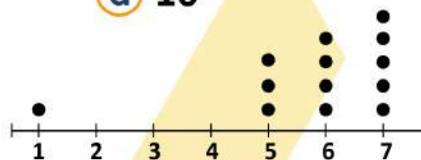
67 In the algebraic expression : $5x - 4 + 5m + 3$, the two like terms are

- a** 3 and 5m **b** 3x and 5m **c** 3 and - 4 **d** 5x and 3

68 The distance between -5 and its opposite on the number line is unit(s).

- a** zero **b** -5 **c** -10 **d** 10

69 The will be the best choice as a measure of central tendency in the opposite figure.



- a** mean **b** median **c** range **d** both mean & median

70 have a horizontal axis.

- a** bar graph **b** histogram **c** box plot **d** all of the previous

71 is neither a positive nor negative number.

- a** -1 **b** 1 **c** 0 **d** 2

72 If the range of a set of values is 11 and the smallest value is 7, then the largest value is

- a** 4 **b** 18 **c** 77 **d** 70

73 If the mode of these value 5, 7, 2, 9, 5, 7, $x + 1$, 3 is 7 then $x =$

- a** 7 **b** 5 **c** 6 **d** 4

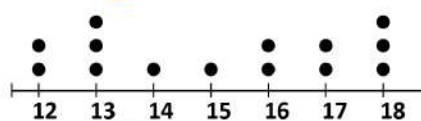
74 Number of solutions of inequality $x > 10$ is

- a** 0 **b** 1 **c** 2 **d** infinite

75 If the mean of the values 3, 9, 4, x , 8 is 6, then the value of x is

- a** 6 **b** 4 **c** 8 **d** 3

76 The will be the best choice as a measure of central tendency in the opposite figure.



- a** mean **b** median **c** range **d** both mean & median

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Q2: Complete the following:

- 1 In 3^8 : 3 is called and 8 is called
- 2 The value of the expression $3(2h - 3) + 2$ at $h = 2.5$ is
- 3 Six squared =
- 4 Write inequality that represents all values less than -5
- 5 In the rule: $y = 4x$, if $x = 1.3$, then $y =$
- 6 Write inequality that represents counting numbers
- 7 If the range of a set is 20 and the smallest value is 9, then the largest values
- 8 The number of integers between -5 and 2 is
- 9 Opposite numbers on a number line have the absolute values.
- 10 The number just come before -9 is
- 11 The GCF of two prime numbers is
- 12 $5 \times (\dots + \dots) = (\dots \times 2) + (\dots \times 4)$
- 13 All prime numbers are odd exceptis an even number
- 14 The common multiple of all numbers is
- 15 Double x added to 4 equals y as algebraic expression is
- 16 The smallest non-negative integer is
- 17 Range = —
- 18 The greatest non-positive integer is
- 19 Marwan read at least 5 books ,then Marwan may be read book[s]
- 20 The verbal form of " $2x + 3$ " is
- 21 Twice the sum of a number and five is
- 22 The least common multiple of the two relatively prime number is

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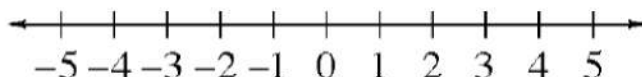


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- 23** The outliers in the set of values 5, 18, 3, 4, 6, 8 is
- 24** The integer that express " move forward 6 steps" is
- 25** and are affected by the presence of outliers.
- 26** If the rule is "Add 9", the equation so, if x is 4 then the output is
- 27** The like terms in the expression : $2x + 3x + 3$ are
- 28** The smallest positive integer number is
- 29** - 6 in form of fraction is
- 30** Set of counting numbers to set of natural numbers
- 31** The constant in the expression $3y + 2x - 5$ is
- 32** If $384 \div 16 = 24$, then the dividend is
- 33** Range cannot be found by using
- 34** The number just come before - 9 is
- 35** Set of rational numbers to set of integer numbers.
- 36** Murad has 120 crayons distribute them among 6 of his friends, how many left?
- 37** The number - 1.5 in fraction form is
- 38** If the range of a set is 25 and largest value is 52, then smallest value is
- 39** The common factor of all number is
- 40** The algebraic expression for "a number less 7", is
- 41** Write inequality that represents non-negative numbers
- 42** The median of the values 5, 8, 10, 2, 7 is
- 43** data is written in form of words
- 44** Do you like the red color? is a data
- 45** Represent $x \leq 2$ (x is an integer) on number line:



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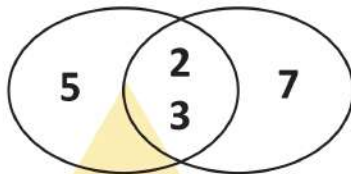


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Q3: Answer the following:

- 1 Karim 48 pencils and 18 crayons. What is the numerical expression of the greatest number of sets that can be made so that all sets include the same number of items?

- 2 The two numbers represented in the venn digram are and
 - The common prime factors of the two numbers are
 - The GCF of the two numbers is
 - The LCM of the two numbers is
 - Are the two numbers relatively prime number?
 (Yes or No)

 
- 3 Use venn digram to find GCF and LCM of :
 a) 15 and 10
 b) 24 and 18

- 4 Write two rational numbers lying between each of the following pairs of numbers:
 a) - 5.1 and 5.2
 b) $\frac{3}{5}$ and $\frac{5}{7}$

- 5 Arrange the following in descending order:
 7.5 , $-2\frac{1}{3}$, $-\frac{8}{9}$, $|-1|$, $|-3.5|$

- 6 Write verbal expression for each of the following algebraic expression:
 a) $3(m + 4)$
 b) $8 - 3n$
 c) $\frac{3}{5}y + 5$

- 7 Write an algebraic expression for each of the following verbal expressions:
 a. The quotient of a number by 8 is increased by 12 is
 b. Twice the sum of a number and three is

- 8 Use order of operations and exponents to simplify each of the following expressions.
 a) $8 + 4^2 - 5 + 6(60 \div 20)^2$
 b) $4^2 + 5(b^2 - 3)$ for $b = 2$



- 8** Sandy has 300 L.E, her weekly pocket money she spends 25 L.E. daily.
- The algebraic expression represent that is
 - The remained money after 4 days is
 - The remained money by the end of two weeks is

- 9** Check the following expressions where each pair is equivalent or not.

Use two values for x from your own

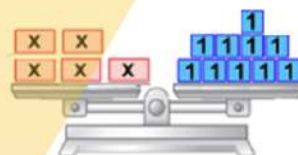
- $x + 5$ and $3(x + 2) - 2x - 1$
- $3 + 2x$ and $3 + 2(x + 3)$

- 10** Solve each of the following equations:

- $16 = n - 3$
- $70 = 50 + t$
- $3x + 8 = 29$

- 11** Write the equation that represents the following model, then find the value of x:

- Equation is
- Value of x =



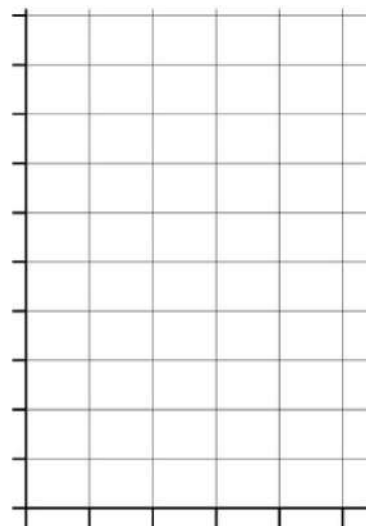
- 12** Name 3 solutions of each inequality. Then graph the inequality on a number line in the set of integers:

- $x \leq 6$
- $y \geq -2$

- 13** Complete the following tables, then make the graph.

The equation: $y = 3x - 3$

x	1	2	3	4
y				
(x, y)				



45 Draw the box plot for the following data:

5 , 7 , 13 , 11 , 2 , 1 , 2 , 14 , 16 , 10 , 3

Then find: Min - Q1 - Median - Q3 - Max

The following table shows the marks of a group of students in an exam

Marks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of students	2	1	3	1	1	3	1	2	1	1	2	1	2	1	3	4	2	1	3	4

a. Use a suitable intervals to draw a frequency table.

b. Represent the frequency table using histogram.

Murad saves 120 pounds every month, so if the amount he saves in (x) month is (y) pounds, then

a. The equation that represent this situation is

b. The independent variable is the dependent variable is

c. what Murad saves in a year is

The following table shows the daily wages of 50 workers of a company.

Sets	120 - 129	130 - 139	140 - 149	150 - 159	160 - 169
Frequency	8	10	16	12	4

Draw the histogram for this distribution.

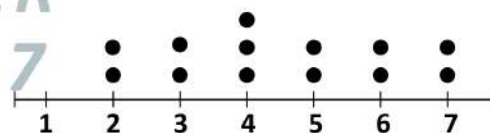
Answer the following by using the opposite dot plot find:

a) The mean

b) The median

c) The range

d) The mode



اللهم اجعل هذا العمل خالصا لوجهك الكريم
واكتب له القبول والنفع يا كريم يا وهّاب.



Revision j6

Choose the correct answer :

- 1) The mode of the values : 5,3,2,5,8,1,5 and 4 is
(1 , 2 , 3 , 5)
- 2) Which of the following is equivalent to the expression : $6X + 1$?
($6X+2$, $8x-1$, $3(2x+1)$, $9x$)
- 3) The outlier of the following values: 32,37,36,5 and 40 is
.....($32,40,5,36$)
- 4) In the equation: $m=3n+4$, the dependent variable is
($m,3,n,4$)
- 5) The median for the set of values: 114,120,97,104,127 is
.....($97,120,101,104$)
- 6) The value of the expression: $5n-2$ for $n=1$ is ($5,3,-2,1$)
- 7) The additive inverse of -2 is ($-2,2,0,4$)
- 8) The smallest counting number is ($-1, 0, 1, 2$)
- 9) $16+24 = 8(2+.....)$ ($24,16,2,3$)
- 10) In the equation : $1860 \div 32 = 58 R4$, the remainder is
.....($1860,32,58,4$)
- 11) In the equation $5t=20$, the value of $t=.....$ ($3,4,5,6$)
- 12) $-\frac{1}{2}$ Zero ($<, >, =, \leq$)
- 13) The mean of the values : 3 , 5 , 4 , 7 and 6 is ($3, 4, 5, 6$)
- 14) The smallest non negative integer is ($-1, 0, 1, 2$)
- 15) 4 0
a) $>$ b) $<$ c) $=$
- 16) If $y = 7 + 3 X$, then (..... , 10) satisfies the equation.
a) 1 b) 0 c) 2 d) 4
- 17) The G.C.F of 10 and 8 is

a) 2 b) 18 c) 40 d) 80

18) Number of solutions of inequality $X = -2$ is

a) -3 b) -1 c) 0 d) infinity

19) $10 - 3\frac{1}{4} = \dots\dots\dots$

a) $7\frac{1}{4}$ b) $6\frac{1}{4}$ c) $7\frac{3}{4}$ d) $6\frac{3}{4}$

20) Y equals the product of X and 3 is

a) $y = 3X$ b) $X = 3y$ c) $X = 3 + y$ d) $y = 3 + X$

21) Which of the following is an integer ?

a) $\frac{5}{16}$ b) $\frac{-2}{4}$ c) $\frac{-15}{5}$ d) -0.4

22) Which of the following are relatively prime numbers ?

a) 2 , 6 b) 7 , 9 c) 4 , 8 d) 10 , 15

23) The number of integers between -5 and 2 is

a) 6 b) 5 c) 3 d) 7

24) The number of terms of expression $5X + 3y - 1$ is

a) 5 b) 3 c) 1 d) 1

25) The median of 9 , 4 , 8 , 1 and 3 is

a) 3 b) 4 c) 5 d) 8

26) The best subset of number 0 is

a) rational b) integer c) counting d) natural

27) The L.C.M of 5 and 7 is

a) 1 b) 5 c) 7 d) 35

28) The range of 11 , 7 , 9 , 13 , 3 is

a) 9 b) 10 c) 8 d) 2

29)The range = the greatest value the smallest value

(- or + or X or \div)

30)The mode of 7 , 9 , 8 , 7 , 6 , 7 and 10 is

(- or + or X or \div)

31)Eight squared = (2×8 or $8 + 2$ or 8^2 or $8 \div 2$)

32)The best subset of the number 0 is

(rational number or natural number or integer or counting number)

33)(-4) 0 ($<$ or $=$ or $>$ or \geq)

34)Which display makes it easier to see the median?

(histogram or box plot or dot plot or bar graph)

35) $8 + 24 = 8$ (..... +) (1, 3 or 8 , 2 or 3 , 2 or 1 , 7)

36) $-\frac{1}{4}$ $-\frac{1}{7}$ ($<$ or $=$ or $>$)

37)6 times m added to 2 equal n in equation form is

($6m - 2 = n$ or $6n + 2 = m$ or $6m + 2 = n$ or $6 \times 2 m = n$)

38) $2^3 =$ (2×3 or 3×3 or $2 \times 2 \times 2$ or $2 + 3$)

39)Which of the following is an integer

($\frac{16}{5}$ or $\frac{-2}{4}$ or $\frac{-15}{5}$ or - 0.4)

40)Which of the following is an algebraic expression?

($3^2 - 4$ or $5x + 3$ or $29 - 3^2$ or $2(4 + 5)$)

41)In the equation $1860 \div 32 = 58 \text{ R } 4$, the remainder is

1860 Or 32 or 58 or 4)

42)..... is the middle value of the data set.

(mean or mode or median or outlier)

[2] Complete :

1) $|4| \times |-4| = \dots\dots\dots$

2) $9 \times 9 \times 9 \times 9 = 9^{\dots\dots\dots}$

3) The smallest country number is $\dots\dots\dots$

4) $8 - 3 \times 2 \div (4 - 2) = \dots\dots\dots$

5) $8(5 + 4) = 40 + \dots\dots\dots$

6) The distance between 5 and - 5 on the number line is $\dots\dots\dots$ units.

7) In equation $3410 \div 63 = 54 \text{ R } 8$ the divisors is $\dots\dots\dots$

8) If mean of 3 , 7 , 4 , 6 , X is 5 then X = $\dots\dots\dots$

9) In the equation $L = 4m - 3$, the independent variable is $\dots\dots\dots$

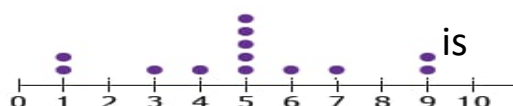
10) The outliers value of the following data (203, 204 , 205 , 23 , 206 , 207, 202 , 201) is $\dots\dots\dots$

11) L.C.M of 5 and 8 is $\dots\dots\dots$

12) The coefficient of $2 + 3a - 5$ is $\dots\dots\dots$

13) The distance between 5 and $|-5|$ on the number line is $\dots\dots\dots$ units

14) The mean of the following data $\dots\dots\dots$



15) The L.C.M of 4 and 12 is $\dots\dots\dots$

16) $7 \times 7 \times 7 = 7^{\dots\dots\dots}$

17) The constant in the expression $5X + 2$ is $\dots\dots\dots$

18) If $m - 2 = 7$, then $m + 1 = \dots\dots\dots$

19) $\frac{7}{9} - \frac{5}{9} = \dots\dots\dots$

20) $2 \times 3 + 5 \times 5 = \dots\dots\dots$

21)The = the greatest value – the smallest value

22)In the equation $7+Z = 17$, the value of $Z =$

23)The coefficient in the algebraic term $(3 \times y)$ is

24)If $5 = |a|$ then $a =$ or

25)If $(7 \times = 35)$, then the value of $x =$

26)In the equation $(y = x + 4)$, the dependent variable is

27)The G.c.f of the two relatively prime numbers is

28)If the mean of the values $(3, 4, 9, x, 8)$ is 6, then value of x is

29)The outlier in the set of values $(5, 18, 3, 4, 7, 6)$ is

FOURTH: Solve the following:

1) Use the order of mathematical operations to simplify:

$$40 + 5(3^2 - 7) + 10$$

.....
.....
.....

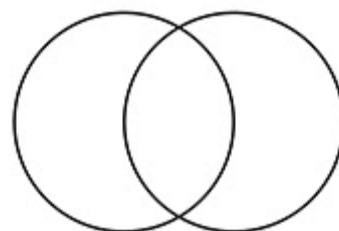
2) Order the given set of numbers from least to greatest:

$$2.1 \quad , \quad -3\frac{1}{4} \quad , \quad -1\frac{7}{8} \quad , \quad -2\frac{1}{2}$$

The order: , , ,

3) Find the G.C.F and L.C.M of 4 and 6 using Venn diagram:

.....
.....



4) Complete the following table, then represent graphically the equation $Y = x + 1$

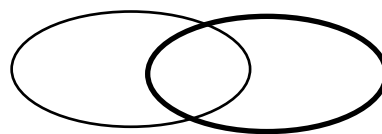
X	0	1	2
Y			
(X, Y)	(0,)	(1,)	(2,)

5) Find G.C.F L.C.M for 24 and 16

6) A factory produces 48 pieces of cloth daily. How many days does it produce 1.152 pieces of cloth?

7)Use the order of operations to simplify : $4 + 3^2 \times 2 \div (3 - 1)$

8)Find the G.C.F and L.C.M of 10 and 30 using venn diagram



9)Complete the following table, then represent it graphically

The equation : $Y = 3x + 1$

X	0	1	2	3
Y	.....	.....	.....	.....
(X,Y)	(0,.....)	(1,.....)	(2,.....)	(3,.....)

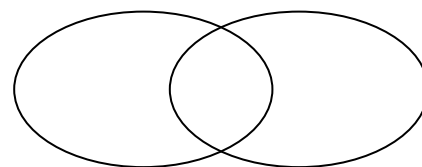
10)Find the G.c.f and L.c.M using, the Venn diagram for 24 and 16.

24 =

16 =

G.c.f =

L.c.M =



11)Ahmed has $5\frac{2}{3}$ and Tamer has $15\frac{1}{2}$ L.E, find out the total sum of what they have altogether.

.....

12) Find the value of:

$$3 \times 2^3 \div 12$$

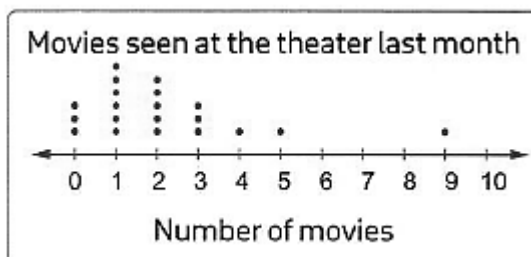
.....

13) From the opposite dot plot,Answer the following questions :

a) How many people saw 2 movies ? ...

b) How many people surveyed ?

c)How many people saw 3 movies of more ? ..



14) Use order of operations and exponent to simplify:

$$2 \times 4 + (3^2 - 20 \div 5)$$

.....

.....

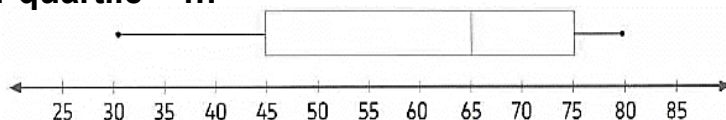
.....

15) Use the opposite box plot to complete the following :

a) Minimum value = c) Maximum value =

b) Median = d) Lower quartile = ...

e)Upper quartile =



16) arrange in an ascending order :

$$5, -5.5, -5, 5.7, -1, |-6|$$

.....,,,,,